

THE
ARCHITECT
& BUILDING NEWS

4 NOVEMBER 1959

VOL. 216

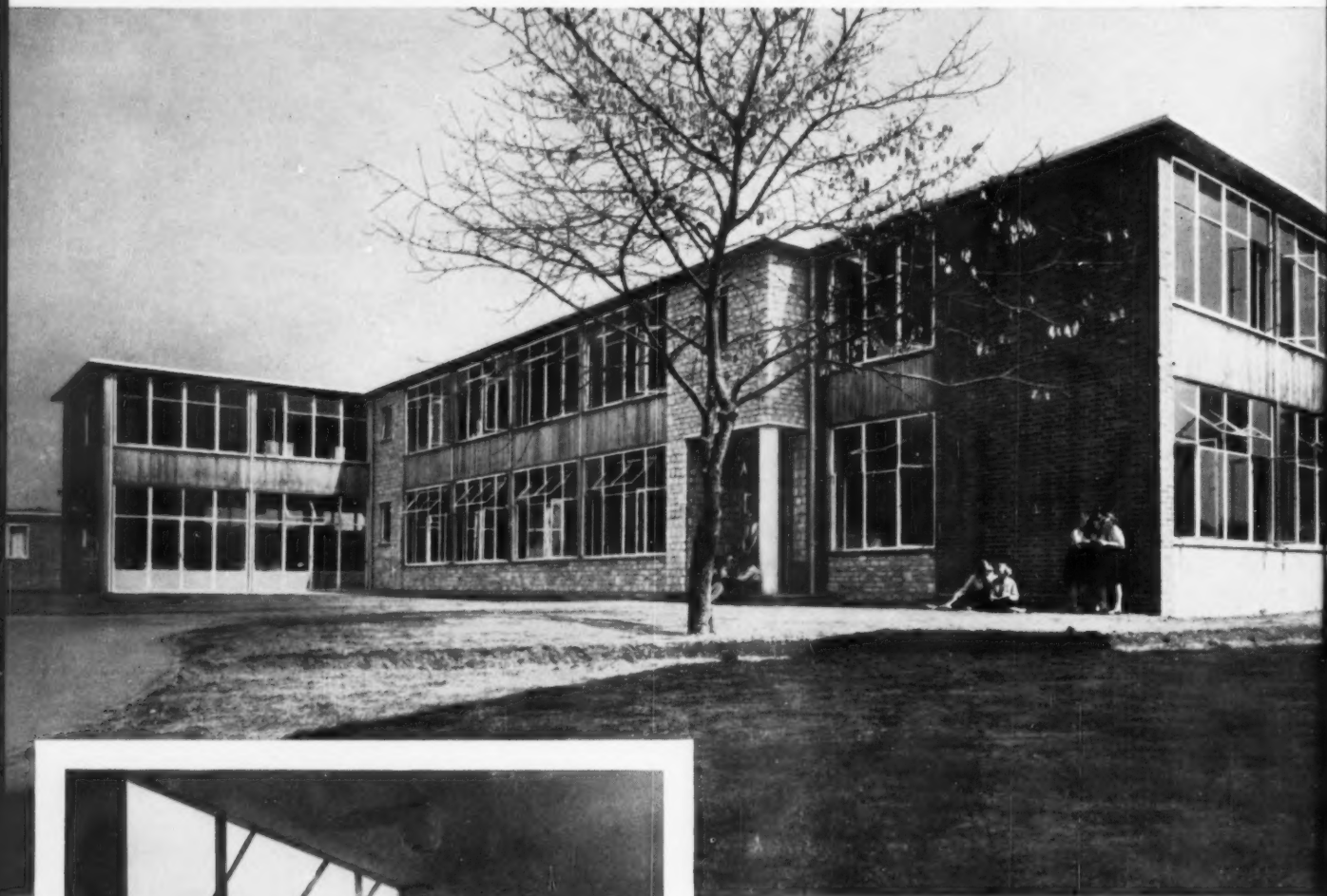
NO. 13

ONE SHILLING WEEKLY

RAILWAY ARCHITECTURE

PUBLISHED IN LONDON SINCE 1854

Specify **NEWMAN'S** Window opening gear



Buildings of today...

The Girls Grammar School, Stratford on Avon, is a fine example of contemporary architecture, blending with an existing traditional building. This can be seen on the interior view, where another point worthy of note is the neat and unobtrusive appearance of Newman's Window Opening Gear.

*John P. Osborne & Son F/A.R.I.B.A. Architects
in collaboration with
G. R. Barnsley F.R.I.B.A. County Architect, Warwickshire
Window Contractors: W. & J. H. Oldaker*

NEWMANS

WILLIAM NEWMAN & SONS LIMITED
WELLHEAD LANE, BIRMINGHAM, 22 B
TELEPHONE: BIRCHFIELD 5668
HEAD OFFICE: HOSPITAL STREET, BIRMINGHAM, 19.

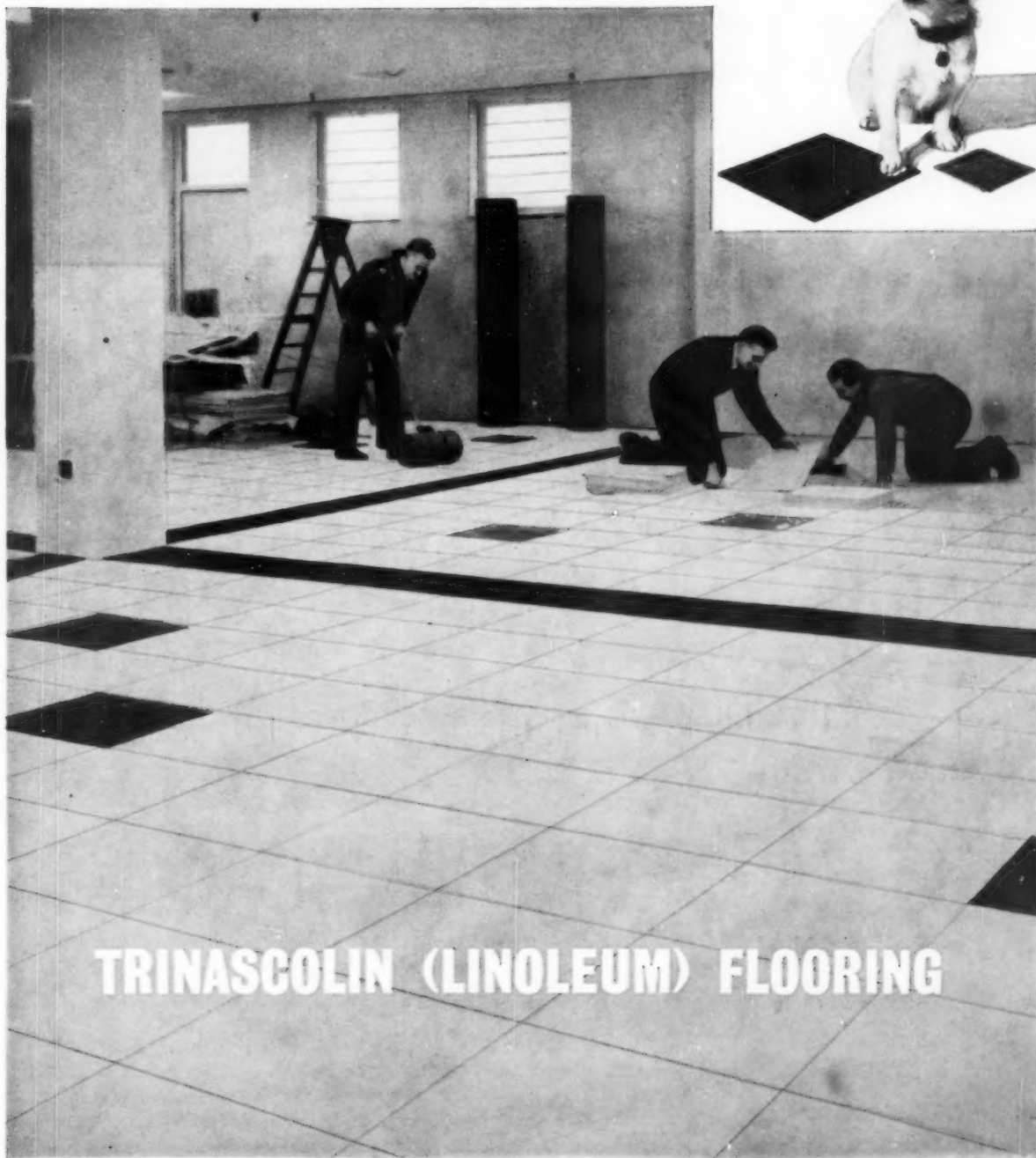
Shaft and Lever Gearing is neat and inconspicuous when designed with the co-operation of the architect and window manufacturer.

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Here is another example of TRINASCOLIN Linoleum Flooring, in process of being laid by craftsmen of the Limmer & Trinidad Group of Companies who are specialists in all types of Decorative and Industrial Surfaces. Descriptive leaflets are available.

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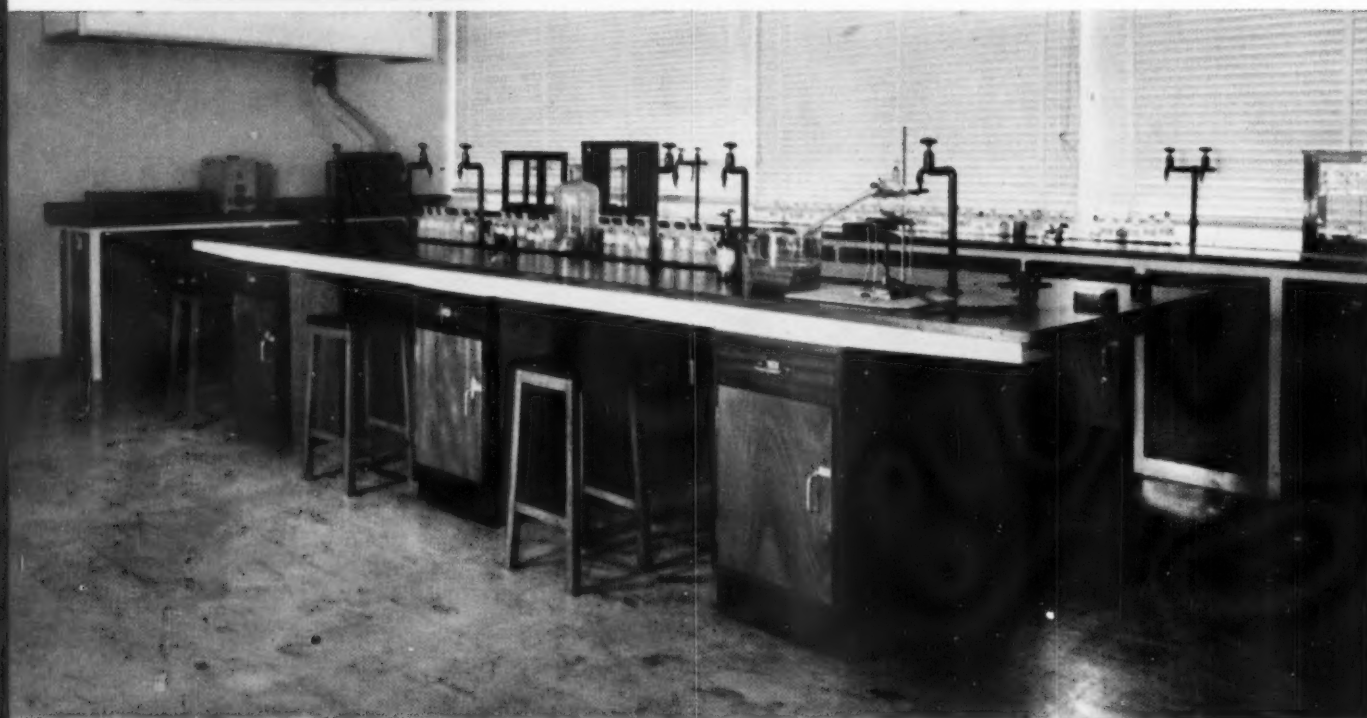
THE TRINIDAD LAKE ASPHALT CO. (NORTH WESTERN) LTD.,
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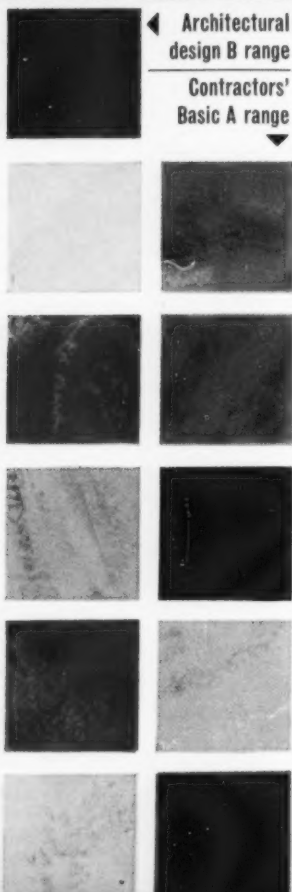
THE ARCHITECT and Building News, 4 November 1959

present a complete



Architectural
design B range

Contractors'
Basic A range



ARCHITECTS—CROWE & GREENWOOD

CONTRACTORS—HASKEL ROBERTSON

One of the reasons why Nairn Vinyl tiles are used in the laboratories at Croydon Girls' High School is their high resistance to chemical spillage.

for commercial and

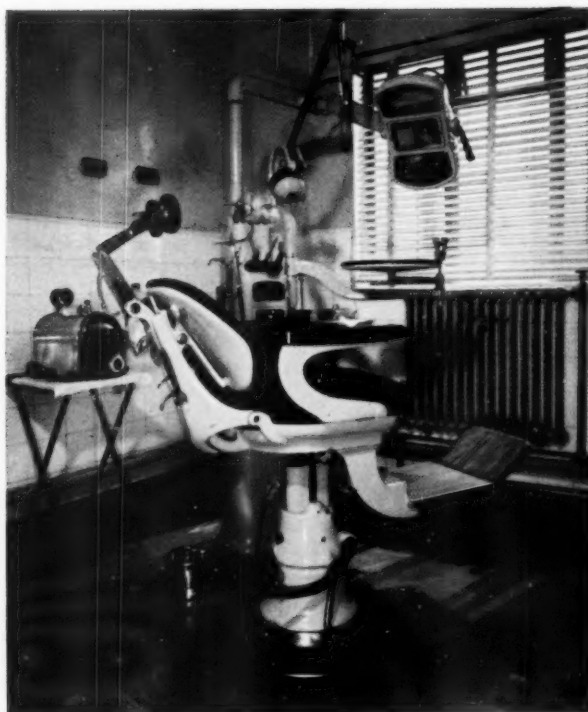
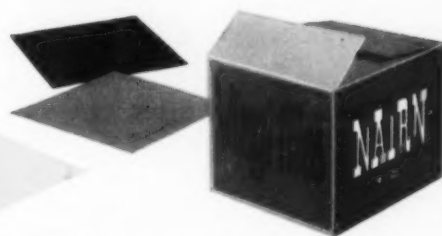
HEAVY-DUTY GAUGE

HOW TO CREATE ATTRACTIVE FLOORS INEXPENSIVELY

Nairn have produced two ranges in the 3.2 mm gauge for commercial application. There are five colours in the contractors' basic A range and six in the architectural design B range. Tiles in the A range, consisting of the colours that constitute the greatest demand from architects, are produced to a specification especially for contractors interested in laying floors at highly competitive prices—and these two ranges now make it possible to create attractive and imaginative flooring schemes for a low cost. This is done by incorporating just a few of the lighter, more expensive tiles from the B range.

A special feature of the range is the 12" x 12" tile—the most economical size for laying, and the most visually attractive in large installations—which is available in all colours of this range. Normal thermo-plastic techniques are used for laying these 3.2 mm tiles. And, under certain conditions, they can also be laid on direct-to-earth concrete floors without a damp-proof membrane.

range of Vinyl tiles



CONTRACTOR—S. & S. FLOORS LTD. The dental surgery of a forces base in the north of England. This floor covering of Mermaid 3.2 mm Nairn Vinyl tiles is easy to clean and therefore hygienic. It is also unaffected by antiseptic cleaning agents.



CONTRACTOR—A. B. DALZELL LTD. The kitchen of a family home at Wimbledon. This attractively designed floor is laid with Mimosa and Pewter 2.0 mm Nairn Vinyl tiles.

domestic use

DOMESTIC GAUGE

There are nineteen colours in the 2.0 mm domestic range, giving the greatest possible scope for expression in colourful and attractive design.

Plain black and white are two of the colours in this wide range for which there is a particularly big demand. Prices are competitive and uniform throughout the range. This means that the exact cost of a flooring scheme can be assessed quickly and easily.

These Nairn 2.0 mm Vinyl tiles can be laid at room temperatures above 65°F. without tile-heating equipment, and this greatly simplifies the laying of the smaller domestic installation.

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All tiles conform to the appropriate draft British standards for vinyl (asbestos) floor tiles, and each batch is thoroughly tested both physically and chemically in the Michael Nairn laboratories.

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MICHAEL NAIRN & CO. LTD. P.O. Box 1, Kirkcaldy, Scotland
Kirkcaldy 2011 (10 lines)

LONDON EC1: 131 Aldersgate Street, Monarch 3211 (8 lines)

BIRMINGHAM 2: 65 Temple Row, Midland 5989 (2 lines)

BRISTOL 4: 349 Bath Road, Bristol 77840

MANCHESTER 1: 4 Canal Street, Minshull St. Central 1417 (3 lines)

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Please write for illustrated leaflet.

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- ▲ The lower courses on the ground and first floors of the Sunbeam Electric Limited factory at Nerston, East Kilbride, are faced with Turquoise "Muroglass". Factory owners: Scottish Industrial Estates Limited. Architects: Wylie, Shanks & Underwood, Glasgow.
- ▼ Spandrel cladding on the Luton Head Post Office is in Grey "Muroglass". Daffodil "Muroglass" has been used below the sills of the office at the north end of the building. Designed in the Chief Architects Division of the Ministry of Works.



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The whole new range, now in sheets 9' x 4' as well as 8' x 4', thickness $\frac{1}{8}$ ", is *always available* in matt and gloss finishes—plus new wood veneers that really do look like wood! Write to the address below and ask for facsimile Colour Chart and list of Distributors.

Decorplast

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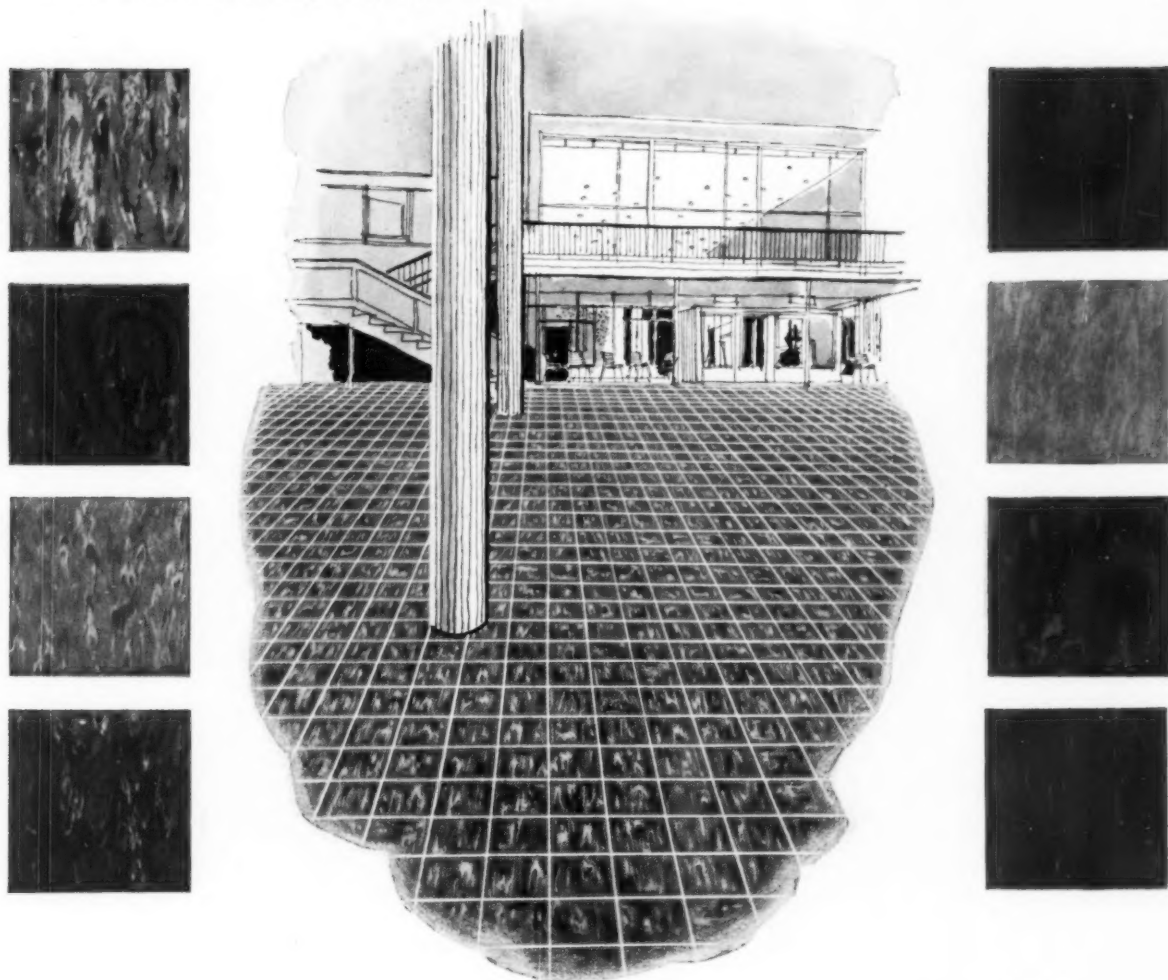
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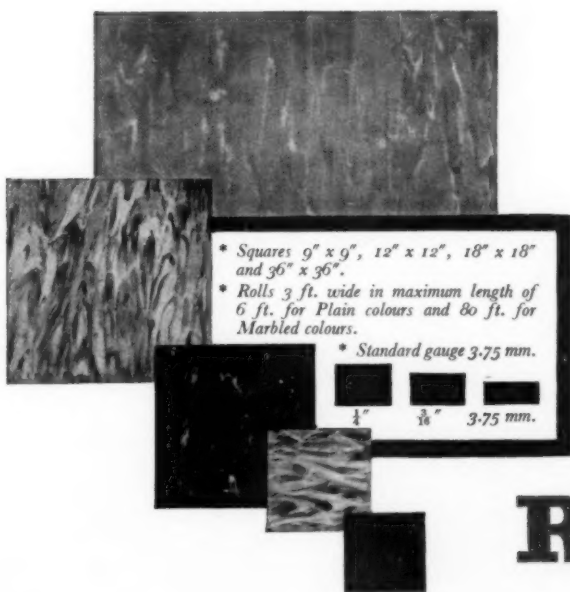
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* Standard gauge 3.75 mm.

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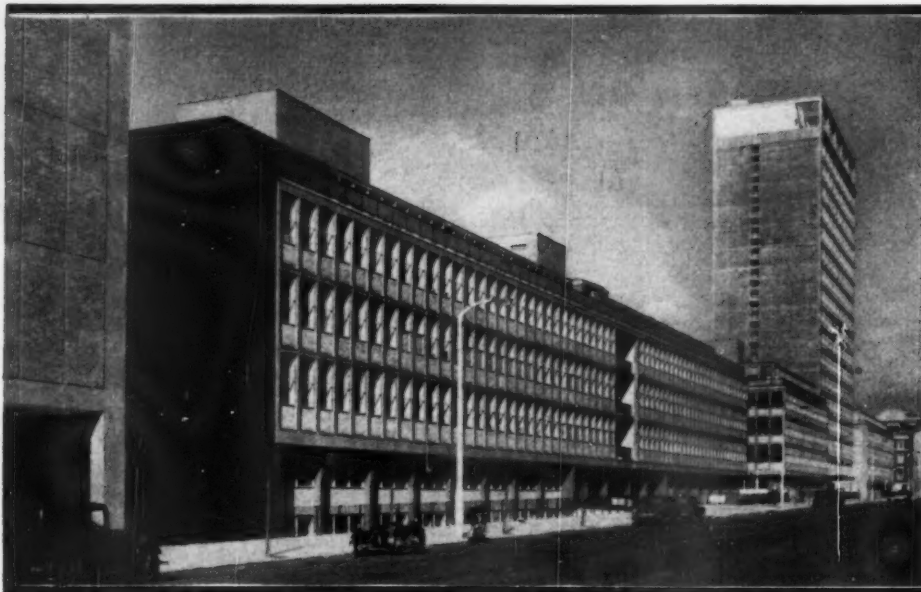
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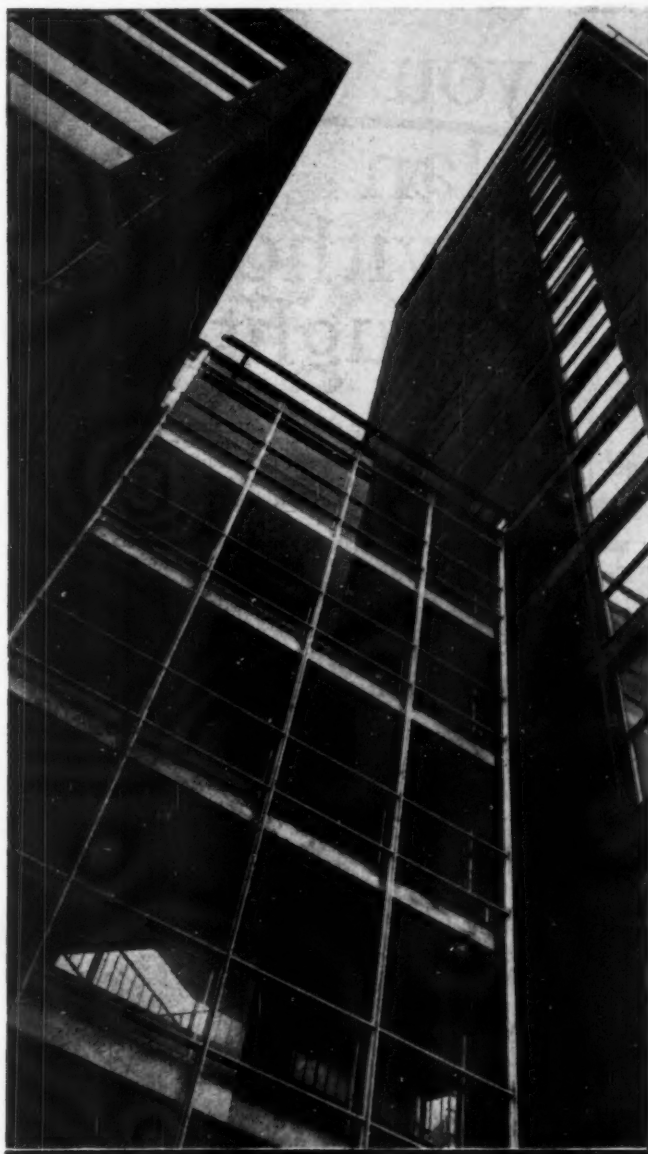


Despite the fact that this is one of Britain's tallest office blocks, it was up and occupied in the fantastically short time of 19 months.

Offices at Paddington.
Architects:
C. H. Elsom and Partners
Architect in charge:
F. P. Softley, A.R.I.B.A.

And she'd probably say that this is her favourite office block—the famous Eastbourne Terrace development at Paddington—it contains no less than 2,698 aluminium double-hung windows by Williams & Williams. This is the largest aluminium sash window contract carried out recently in this country.

The scheme occupies 1,000 feet of frontage along Eastbourne Terrace. The component buildings have been planned in varying sizes and heights to give each its own identity



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AND THE PURPOSE MADE BALUSTRADING

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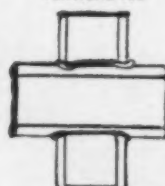
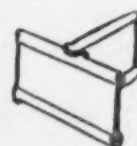
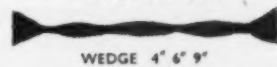
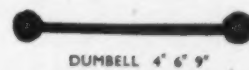


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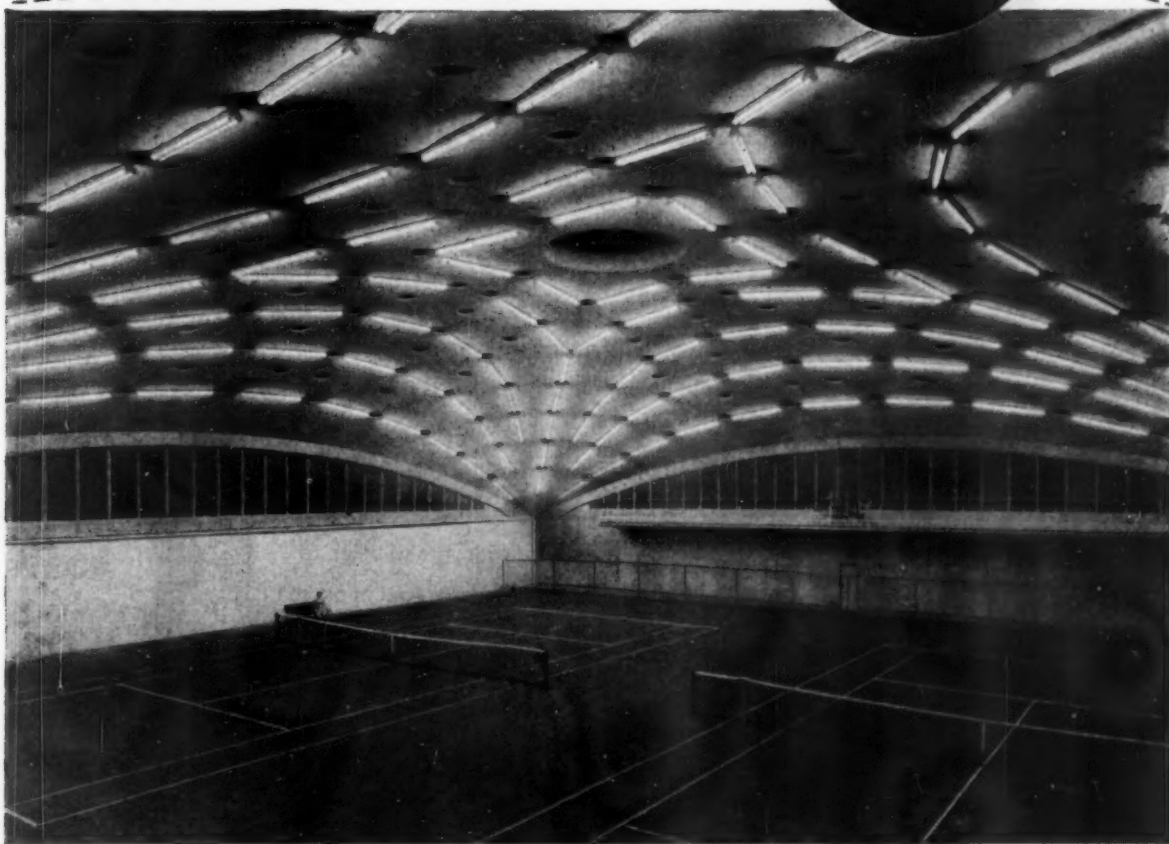
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NOV 18th—DEC 2nd STAND No 617
NATIONAL HALL GALLERY, OLYMPIA

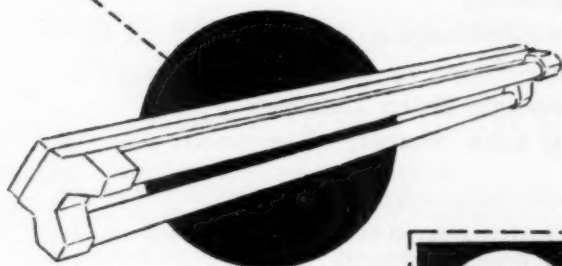
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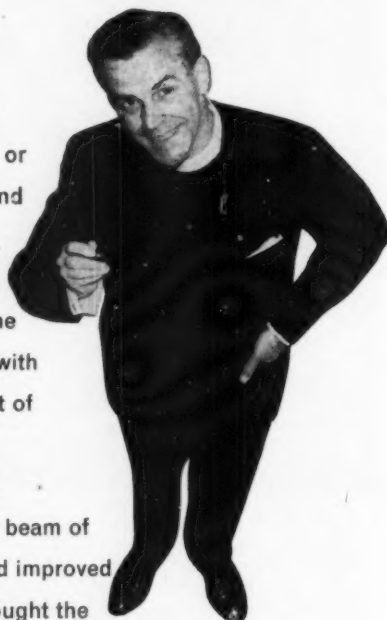
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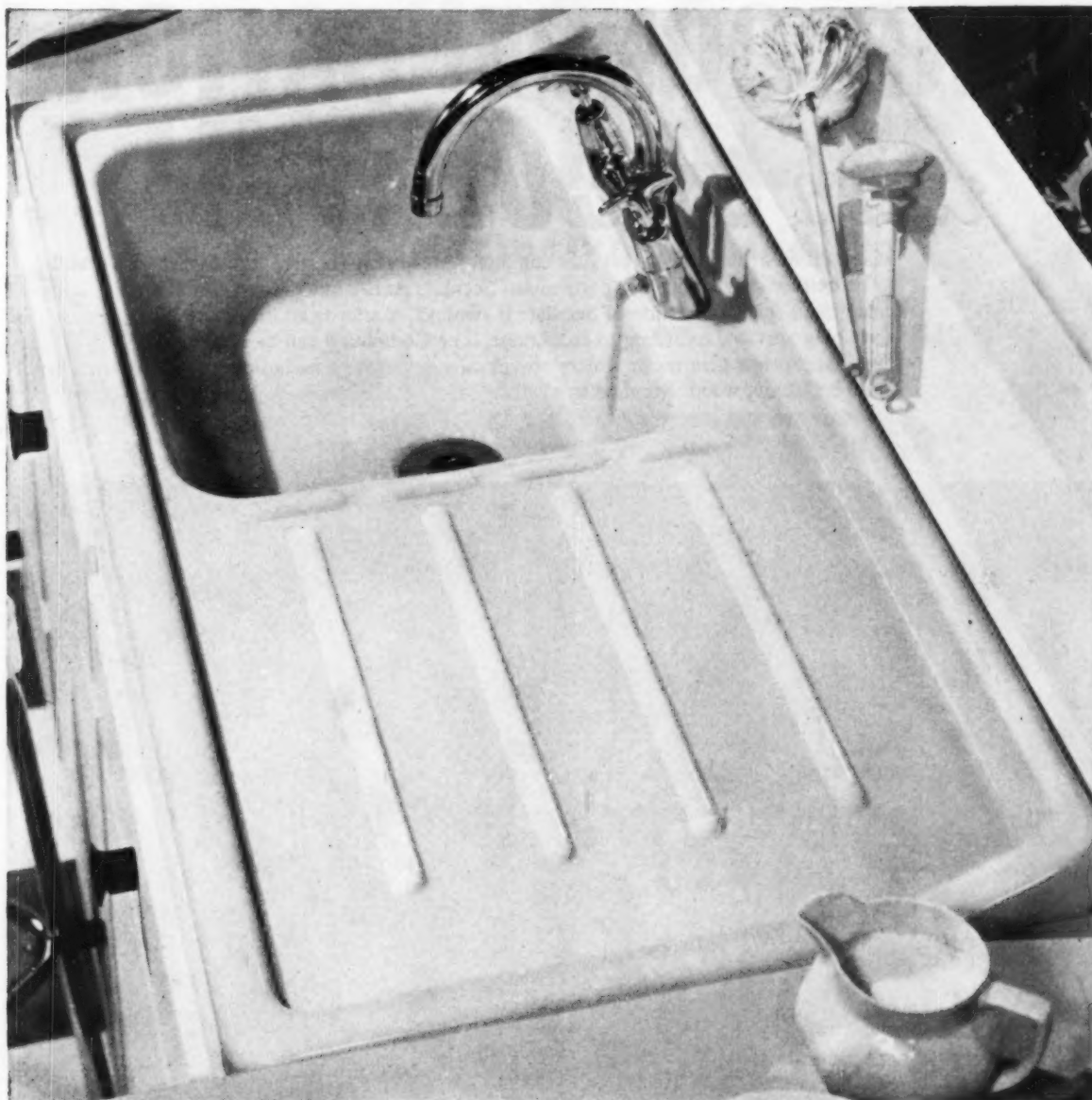
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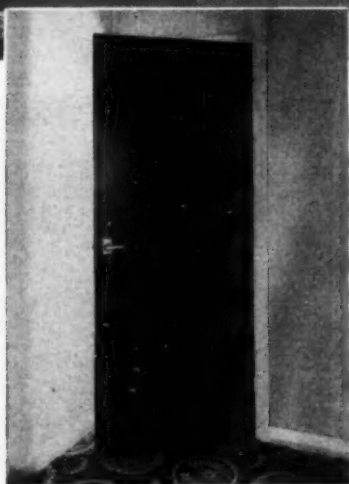
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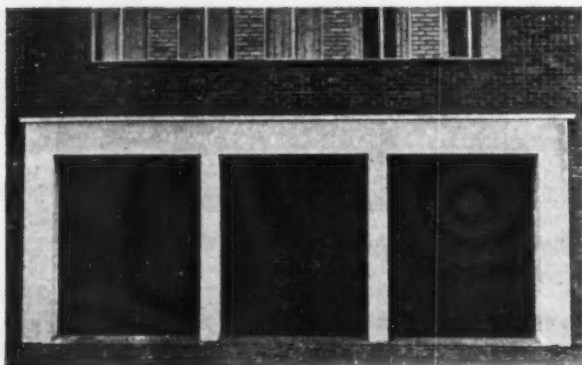


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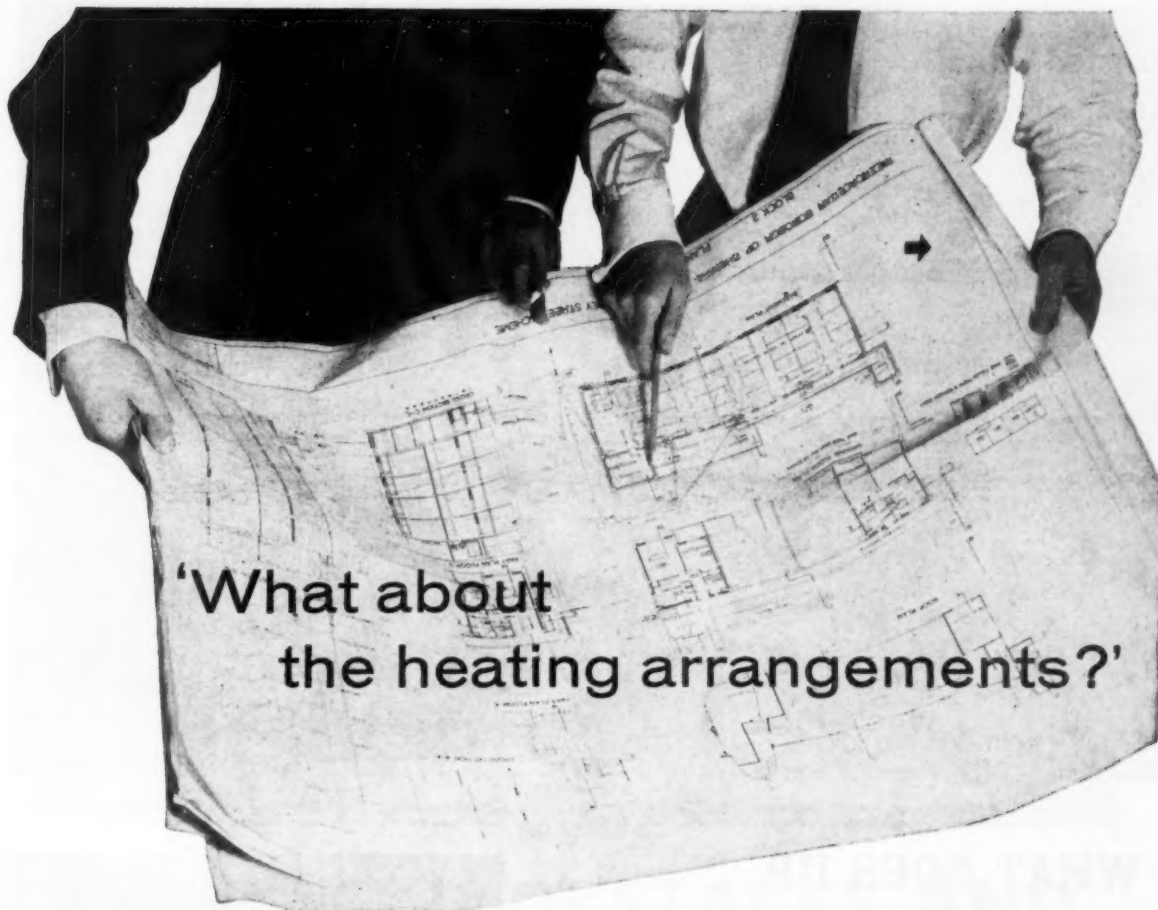
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AT THE BUILDING EXHIBITION**

*Our Estate Representative will be available
to discuss your plans on*

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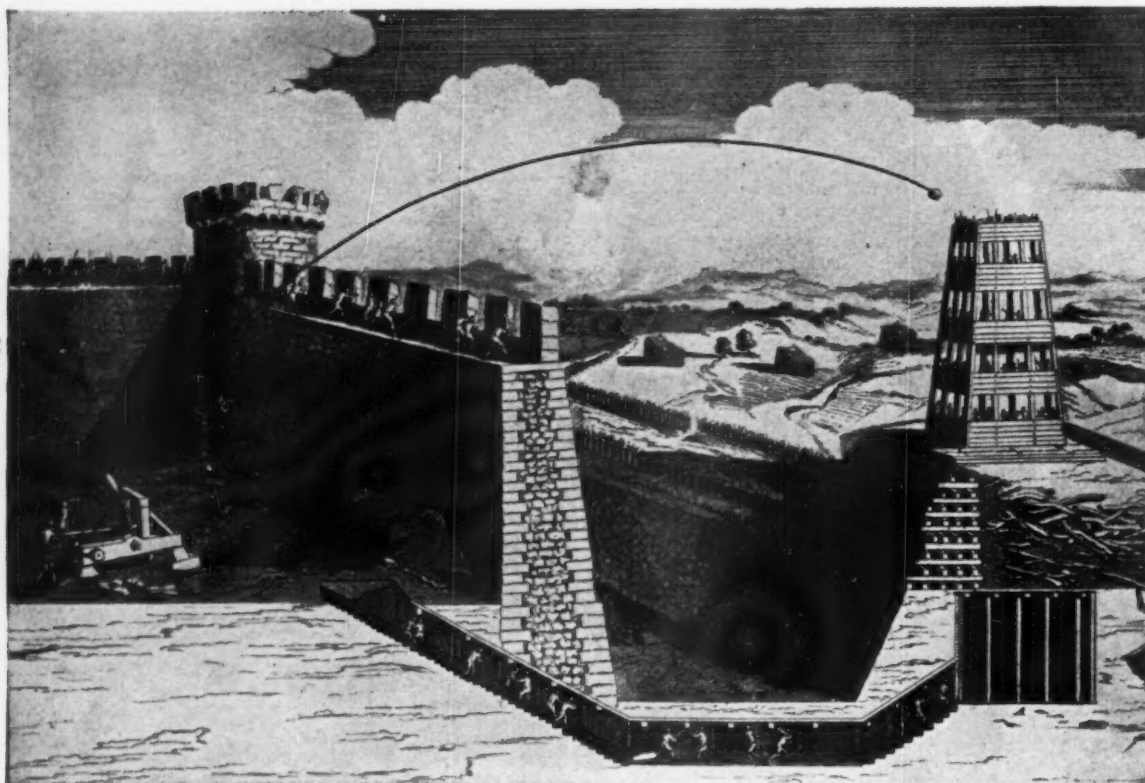


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The siege engine of Cosroe at the Siege of Edessa during the Crusades.

WHAT GOES UP... MUST COME DOWN!

That is why so many lighting installations incorporate L.E.F. Raising and Lowering Gear

The problem of servicing lights high up out of reach is one frequently met by the Architect. Yet it can be so easily overcome by the use of L.E.F. Raising and Lowering Gear which enables lights to be lowered to ground level. Not only is this system quick and simple, but it is also more economical of maintenance labour. An important factor from the Architect's point of view is that the gear can be unobtrusively built into the ceiling.

L.E.F. Raising and Lowering Gear is designed for both interior and exterior lighting and it is particularly important that London Electric Firm are consulted at the planning stage to meet technical requirements.

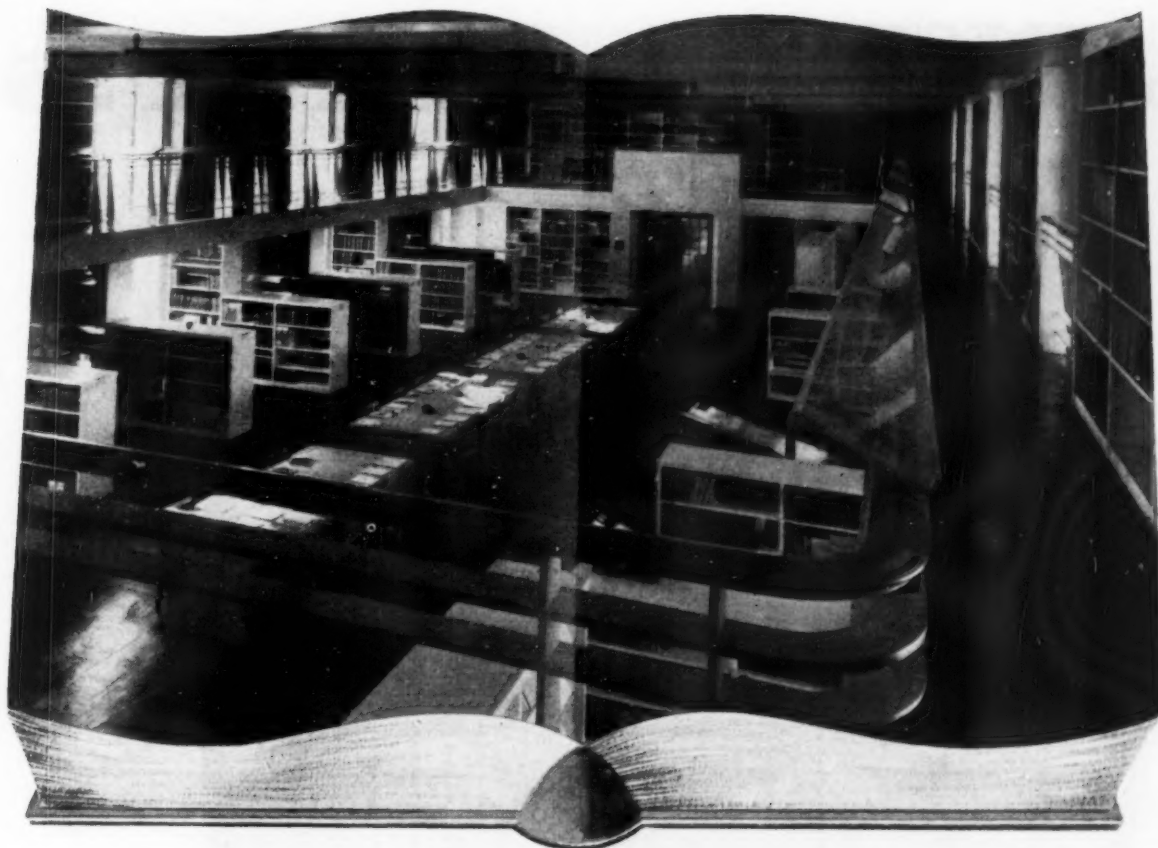


LONDON ELECTRIC FIRM LTD., South Croydon, Surrey. Telephone: Uplands 4871



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The main lights over the under-writing room of this new building presented a maintenance problem which was overcome by the installation of L.E.F. Raising and Lowering Gear. The Raising and Lowering Gear is built into the ceiling and is completely concealed when the lighting fittings are in the raised position.



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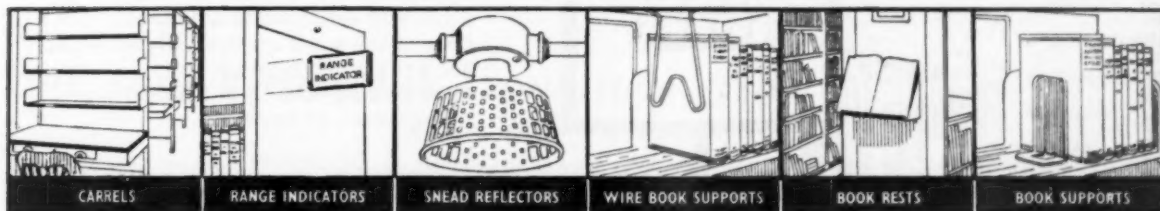


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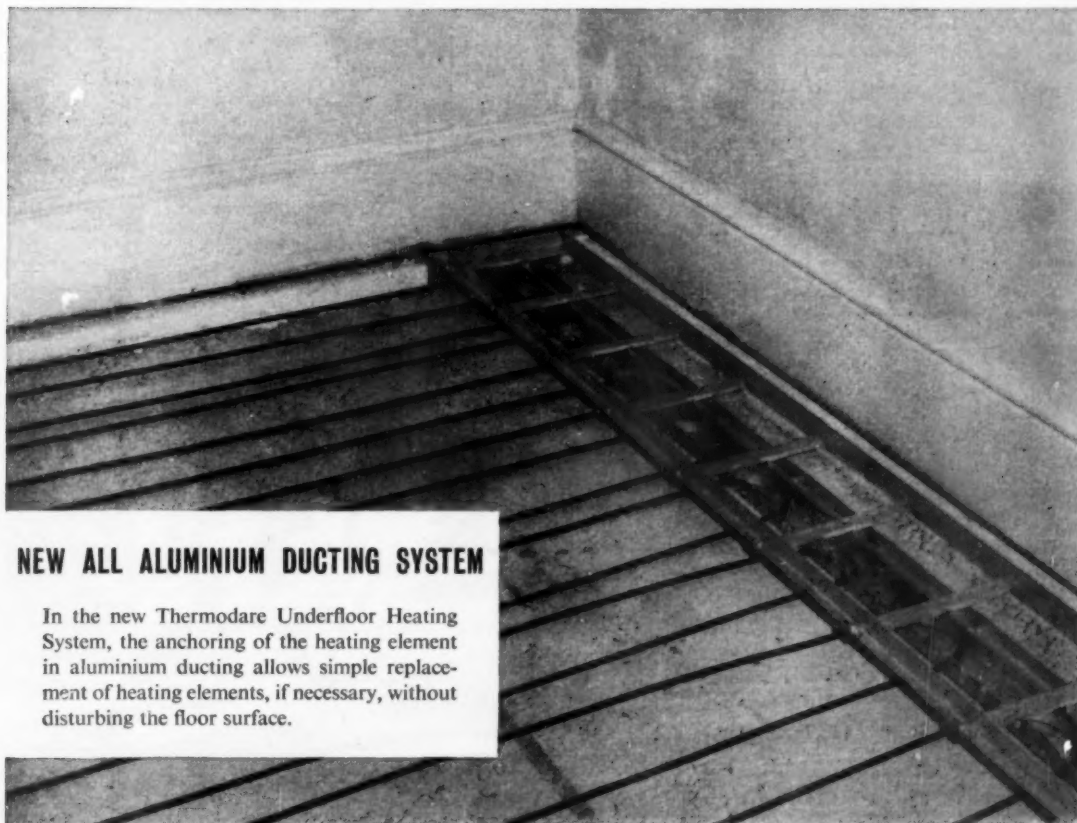
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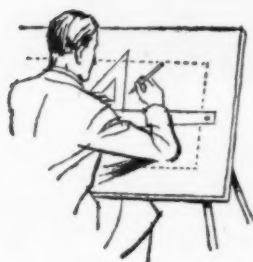
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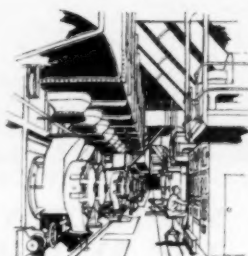
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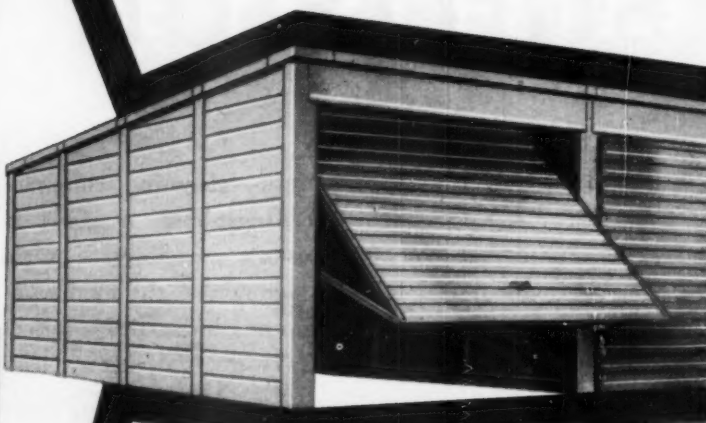
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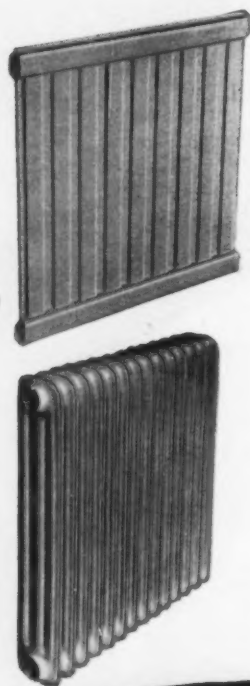
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THE ARCHITECT & BUILDING NEWS

4 November 1959

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MANAGEMENT SUBCONSCIOUS

THE second annual seminar* of the recognized schools of architecture have discussed if, how and when problems of cost control and management should be introduced into the schools' curricula. Surprisingly, there seems to have been general agreement—and this from a body mainly of teachers—that much could be done to inculcate at an early stage of student training an appropriate discipline of mind in these directions without, it should be noted, adding something extra to the already overloaded syllabuses.

It is suggested that a reorientation of student programmes, with practising architects examining the briefs, would make programmes a more realistic exercise within the traditional "creative design emphasis", and would give the student the right sense of responsibility in his future professional conduct and an awareness of the correct balance between art, function, cost and time in his design.

There is much to be said for this suggestion, if enough architects with the right practical experience can be found to come along when required. There is not a single answer but several to this question of developing management awareness—which should be so automatic as to work from the subconscious. The raising of the standard of school entry into the profession should help. If all architectural students were urged to mix, particularly during their early impressionable years, a great deal more with students training for other professions, they might have a better chance of absorbing the practical facts of life, and of

gaining that breadth of outlook so essential to the profession.

* * *

"Management in the U.S.A. is not cost conscious, it is cost subconscious, and it is this rather than legal sanctions or humanitarian considerations which made American building management accept many years ago that accident prevention is as an important a function of management as production, cost control or plant maintenance."

We quote from Peter Trench's address** at a one-day conference on "Training for Safety in Industry" held last week at Birmingham.

Mr. Trench visited the United States of America to find out why the building industry over there, very like our own, with a small number of national and international firms and a large number of small firms, could pay wages generally three times as high as in this country and in New York six times that in London; yet their buildings certainly did not cost twice as much as ours.

The facts which lead up to Mr. Trench's final answer were: harder working operatives than in the U.K., cheap machinery, available materials and cheap by comparison with labour, first-class sub-contracting services, simple design, repetitive processes and—above all—first-class management.

The moral is, of course, obvious. And no better time to point it out than now, with winter approaching and the need for those in charge of, and operatives working on, building sites to be at their most vigilant against accidents.

* See page 392.

** "Management in the U.S. Construction Industry and its Attitude to Accident Prevention," by Peter Trench, O.B.E., Director, N.F.B.T.E.

EVENTS AND COMMENTS

A NEW FILM ABOUT LEAD

The large room at the Royal Society of Arts was almost filled one evening last week for the first showing of the Lead Development Association's new film: "Lead, the Enduring Metal". I was unable to identify most of the audience, but those I knew were either journalists, lead men or people concerned with other metals. The film is not technical and sets out to give general information about the origins and uses of lead. It does this very well, the widespread uses of the metal providing good material for a variety of dramatic shots. The photography is mainly very good, although the quality of the colour is variable. I found the most interesting shots of life in an atomic research station rather frightening. Here is a strange, sinister world of white-coated workers and almost human mechanical devices. Lead, the great protector, here really comes into its own and seems to be quite indispensable. At the same time, by its immense weight, it affects the whole organization and controls the speed of all movements. It made me feel as if I were wearing diver's boots.

Lead, it seems, is used in nearly everything, and although its weight does not seriously affect some things, in many others it must be accounted a very considerable bore. Lead may be the enduring metal, but, oh lor! the weight. A lighter substitute is badly needed.

INTERNATIONAL FILMS AT THE B.C.

The Building Centre, always up to something new, is having a most successful international film festival. I hear that after seven seasons of trade films, the audiences and the management were looking for something to bring the sparkle back into the lunch hour on Wednesdays. These foreign films have done that. Films on architecture, town planning, industrial design and arts from eleven countries are being shown, and, if the attendances remain as good as they are at present, the season will be extended until the supply of suitable films runs out.

The Spanish film, "Vision Fantastica", shown last week, was taken direct from the negative with most curious results. I found that after a time my eye and brain grew accustomed to the switching of black and white, and I suppose at that point I became less interested. The makers may have appreciated that this would happen, because now and again they put short sequences in positive film. The effect of this was far greater than it appears in print. The film was a hotch-potch of Spanish life and customs, with industry, landscape, dancing, bull-fighting, fireworks and a visit to the Poado thrown in. Although I enjoyed it for its strange contrasts and patterns, I had a sneaking feeling that it had originally been made as a positive and found not to be very good. Then someone had the bright idea of showing it the other way round.

Today, at 12.45 p.m., you can see three French films.

EUROPE THROUGH JAPANESE EYES

A publisher of technical books told me the other day that architects only buy the glossy picture books. I can well believe this, but it is a humiliating sidelight on the profession. I suppose it can be argued that, generally speaking, we keep up to date by glancing through (who does more?) at least one weekly paper.

Never mind, I like picture books and I have just received an unusual one. It is called "Life and Architecture in Europe", and has been written by a Japanese architect, Masami Tokunaga, who also took the very good photographs. I cannot tell you very much about the text, as it is in Japanese, with the strange exception of the chapter headings, which are in English, and range from "On Stones, Scandinavian and Mediterranean" to "One Night at a Fireside in Oslo". A section of the text is devoted to translations of the codes of professional conduct of the I.U.A., R.I.B.A. and S.A.R. (the Swedish Association) with reports on their organization. There is also a full description of the working of the Building Centre. Flipping through the pages of Japanese print, it is curious to come across the badges of these various bodies. I wish I could read Mr. Tokunaga's views on Europe, for if his writing is as observant as his camera, they should be interesting. I wish, too, that he had named his pictures in English, for although I can identify some, I am puzzled by others. This difficulty is increased by their confused order. The standard of photography is high, with a predilection for old cabs and horses, tiled roofs, tourists' knick-knack shops and the Eiffel Tower. Mr. Tokunaga made his tour in 1957, at the time of Interbau, but for some reason he has included no pictures of it. Perhaps another book is on the way.

I hear that, when he was preparing his book, Mr. Tokunaga very politely asked the R.I.B.A. for permission to translate the Code of Professional Conduct. Permission was given, subject to approval of the draft. The desire to check it faded, however, when the draft arrived, handwritten, in Japanese.

PRESIDENT'S NIGHT AT THE A.A.

The membership of the A.A. sets an example to other organizations in its support of its president. Mr. H. T. Cadbury-Brown, last week, spoke to a full house, which included no less than ten past-presidents of the association. His title, "Ideas of Disorder", and his paper are not easy to summarize. Extracts from his paper are printed in full elsewhere in this issue. Mr. Cadbury-Brown, speaking with considerable force and feeling, complained that in a world which each day becomes more complicated, the individual tends to be lost in anonymity. How could he become a person again? Broadly speaking, by defecting from the orderliness of life. Sir Hugh Casson, who was in his best form in proposing the vote of thanks, pointed out that as far as he personally was concerned, he lived in utter disorder and longed for orderliness. Both he and Mr. Gontran Goulden, who seconded the thanking with formal tread that was positively elder-statesmanlike, pointed out that for orderliness and personal preciseness the president was second to none.

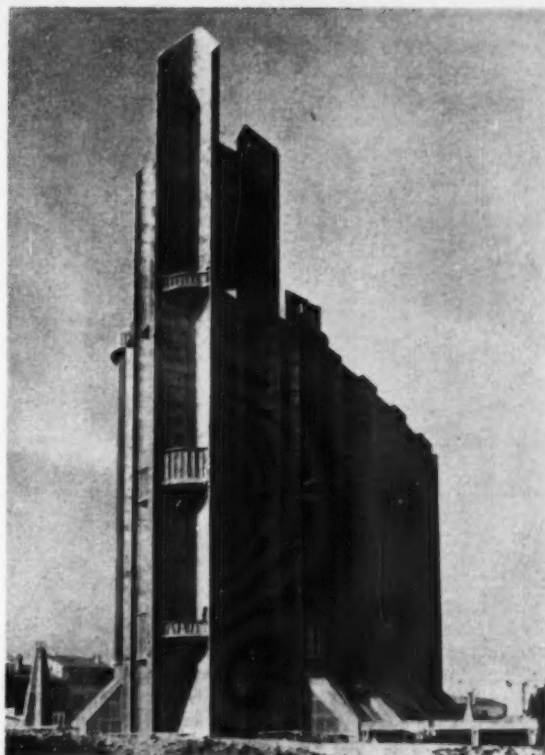
On the future of the A.A., Mr. Cadbury-Brown proposed a revision of the machinery for running the school. At present, the school committee changes every year and never really settles down. As Gontran Goulden said, the more interested the committee is in its work the more impossible does the principal's job become. Mr. Cadbury-Brown's suggestion that membership of the school committee should be for four years is good, and is, in fact, a revival of the Academic Board idea first proposed some ten years ago. Sir Hugh thought that the A.A. thrived on disorder and revolution and hoped it would continue on those lines. Gontran Goulden advocated a two-year term for presidents. I heard some comment on this in the bar afterwards, someone saying that no architect in private

practice could afford the time for a second term, the inference being that there are invisible compensations for presidents of the R.I.B.A. Mr. Cadbury-Brown's tribute to Mr. Michael Patrick was timely. The A.A. never had a more devoted principal. The comparative peace, quiet and student diligence of the past seven or eight years have been largely due to his steady influence. In addition the acceptance by the R.I.B.A. of much needed reforms in architectural education is in great measure due to his straight speaking and bulldog-like tenacity. Discussion of these and other topics continued for several hours in the bar.

RENÉ SARGER

He has sensitive and well-shaped hands, unbounded enthusiasm, and, as one well-known architect said to me at a private dinner in his honour, "he is just like an amiable teddy bear". I was told he drove a party of British architects 350 miles non-stop to Royan to see his work there. Arriving just after midnight they spent an hour or more looking at his concrete church before going to bed.

René Sarger's lecture, "Shapes in Shell", at Friends



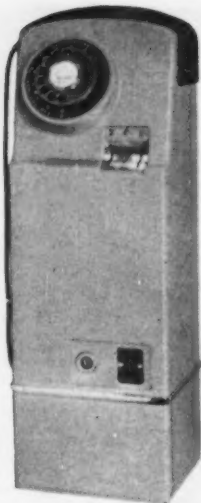
Concrete church at Royan, near Bordeaux, France.
Architect-engineer: René Sarger

House, Euston Road, was enlivened by colour films of some of his exciting buildings. He is probably best known in this country as the designer of the French Pavilion at the Brussels Exhibition. He was trained in Paris, as an architect at the Beaux Arts School of Architecture, and as an engineer at the Ecole Polytechnique, completing both courses fully. He often works in practice now with other architects. Everyone should be grateful to the Cement and Concrete Association for bringing him to London. He follows visits by Nervi and Felix Candela, also arranged by the C. and C.A.

TWO FILMS ON ZINC ROOFING

It is quite a long time since I was able to recommend unreservedly a building industry technical film. Last week at the Zinc Development Association, I saw two instructional films on zinc roofing which may safely be placed in the highest category of their kind. They are short, simple, to the point and well photographed in colour. They contain no facetiousness, or corny cracks, and yet the first of them at once makes a personal contact between the two layers and the audience. The films describe two types of zinc roofing, the roll cap system and the standing seam system. They are designed to be circulated with a lecturer and full-sized examples of the work illustrated.

I have only three minor criticisms. The first is that I, personally, would have omitted the opening and closing music, for I think music is out of place in such a setting and since we are told that the idea is that the film might be run through more than once at the same lecture, the music would become a bore. The second is, perhaps, rather niggling, but the two very well chosen characters who did the laying had unbelievably well brushed hair and I was conscious of it every time they appeared. My third criticism is that several of the close-up shots, showing in sequence the build-up of the joints, moved too quickly for a learner audience. No



The new "pay-on-answer" automatic telephone, 300 of which have just been installed in the Bristol area

EVENTS AND COMMENTS

(continued)

doubt this point would be covered by the attendant lecturer, but if no lecturer were present, I think the audience might be puzzled.

The Zinc Development Association is to be congratulated, as are the producers, Derek Knight & Partners, for setting a new standard for this type of film on the building industry. It is a most heartening sign for those of us who have been complaining for better trade films for so long.

THE STATE OF DESIGN IN BRITAIN

Sir Gordon Russell has contributed a most interesting foreword to the fourteenth annual report of the Council of Industrial Design; it is, in a way, an account of his stewardship as director, for, as you probably know, he retires at the end of the year. He comments on a number of things, from which I have selected those which seem to me to be of particular interest.

Sir Gordon, in praising the architecture of many schools, sees this as a starting point of better architecture all round, better architecture setting the pace for the contents of the house. He says it would be wonderful if the building societies would give a positive lead to better-designed houses and layout and he points out that there can be little doubt that good design in houses and layout offer the best security for their money.

Sir Gordon draws attention to the curious position of British contributions to overseas exhibitions, a point I made in rather less polite language on this page some time ago. "Cultural exhibitions", he says, "are the responsibility of the British Council, trade fairs of the Board of Trade, but an international exhibition of the best examples of industrial design, such as the Triennale in Milan, is nobody's child."

Unofficial Design Centres have started to appear in the provinces and Sir Gordon makes the C.o.I.D.'s policy on them quite clear. "To set up a network of Design Centres is not practicable, in view of the heavy cost involved. It is obvious that a point would soon be reached where manufacturers would refuse to pay for space and would concentrate on showing in London, with its considerable influx of buyers from home and overseas. The best answer which the council has found to this problem at the moment is the large-scale Design Centre exhibition in the enlightened department store."

The C.o.I.D. considers that conditions in Scotland warrant a complete service with a duplicate Design Index and a continuous exhibition.

In his final paragraph, Sir Gordon calls on the country's bulk purchasers of great quantities of manufactured goods—Government departments, the Services

THE ARCHITECT and Building News, 4 November 1959

and companies of international repute—to set a good example by choosing well-designed products, and the foreword ends with these words:

"It may be several generations before such a sensible notion is generally accepted, but when that time comes the Council of Industrial Design will have done its job and there will be very few people who realize how tough that job was in the early stages."

NEW G.P.O. TELEPHONE COIN BOX

For some time I have been muttering to myself about the absurdity of having to find four pennies when I want to telephone from a coin box. My bad temper is not improved by the printed notices telling one not to ask the booking clerk at Underground stations for change. It seems that things are to improve. New coin-box equipment have been installed in Bristol. It is much simpler to operate and it will take threepenny pieces, sixpences and shillings. Furthermore, there is no button B. This is a pity because in no time at all anyone who makes jokes about pressing button B will be an old fogey. On the new system all calls are metred in units of threepence and the box automatically rations your talking time. Money is not inserted until the connection to the number called is made and then a series of rapid pips gives the signal. You buy more time by inserting more money. The new mechanism is housed in an hygienic-looking box, which when installed makes the standard G.P.O. box look like a piece of Victoriana.

ABNER

Letters to the Editor

Council of Churches Conference

Sir,—It appears that the statement issued by the World Council of Churches Conference, held at Bossey, in May, has aroused considerable interest, and a number of architects feel that some useful purpose could be served if a follow-up meeting or one-day conference was held in London early in the new year. In order that such a possibility might be explored, I should be most interested to hear from any of your readers concerned with the problem of church design and who feels that the Bossey statement meets a present-day need.

Yours, etc.,

EDWARD D. MILLS.

Pubs Today : Plastic Table Tops

Sir,—Although I very much enjoyed your special feature "Pubs Today" and heartily agree with most of what is said, I must take issue with Mr. H. Reginald Hind about plastic table tops.

A properly polished wooden top lightly waxed every day does not, as he says, require much work to maintain it as the wax only is marked and is renewed the next day. Plastics, on the other hand, show horrible scratches after a few years' wear, and they must be scrapped and entirely renewed. If wood should be damaged because of neglect, it need not be renewed entirely, but can be planed down and repolished at trifling expense.

To my mind, nothing destroys the true pub atmosphere more than unyielding, cold and unsympathetic surfaces covered with plastics sheet. Possibly polished copper or brass is an even better solution than wood; it should only be installed where there is sufficient staff to give it the attention it needs.

Yours, etc.,

B. R. DAVIS,

Chief Assistant Architect
for Ind Coope Ltd.

ARCHITECTURAL ASSOCIATION

Ideas of Disorder

THE talk was twofold: in the first part Mr. Cadbury-Brown examined some of the characteristics of disorder and later he talked about the structure and policy of the A.A.

Mr. Cadbury-Brown quoted from Mr. George Buchanan's letter published in *The Times*: "The revolutionaries of our time . . . will be those who helped to renew and enrich human feelings. The second stage of the social revolution . . . will be against emotional and aesthetic impoverishment." He questioned whether this implied a revolutionary approach to architecture or whether means of enrichment were already at our disposal. "I would say here," he said, "that I consider enrichment as the architectural means whereby a form of organized disorder is introduced into our background. In scale it may vary from small detail to whole blocks of building."

Mr. Cadbury-Brown went on to say: "In the past, periods of order have followed those of disorder. Man's basic desires make him seek to impose himself on his background: if it is disordered by the imposition of order; if ordered by acts of disorder or even vandalism. The Renaissance was brought about by a desire to impose classical order and clarity on what seemed a chaotic society. Apparent disorder permeated all aspects of life, the political and social environment as well as the physical one, and so the idea of order seemed desirable both in terms of absolute thought and in terms of the visual images produced. Man lives in the cities of his grandfather, if not his great-grandfather and there was sufficient of the medieval world still around until the early part of the nineteenth century to make plain terraces a valid contrast."

"If we think now in terms of the future we must allow for individual variation and self expression to balance the frightening regularity of post-war life. At its extreme limits desire for variation already manifests itself in vandalism against sculpture, against gardens and trees, even against persons. It also manifests itself in fashions and cults. In America, for example, in the 'Beats'. These people react against their socially inhibited and status-seeking contemporaries by the deliberate cultivation of failure and aimlessness. They creep from one bare 'pad' to another, glumly pursuing sensation, not necessarily pleasurable, under naked light bulbs. 'You'll like Dino', one beat girl says to another. 'He's emotionally insecure, sexually maladjusted, can't kick the habit and, on top of it all, there's a sort of Huckleberry Finn quality about him.'"

"Along with the Beat cult goes the phenomenon of action and tachiste painting. Here exclusive emphasis on accident or on the act of self expression are symptoms of the rejection of responsibility. It is a completely understandable reaction against over refinement but fails in my view to have more than the significance of graphic design. It finds its proper place in advertising art, as a dashing background for a Vogue model. The marks left by the skidding bicycle on oily canvas, however sensitive the artist at the wheel, are in the same aesthetic category as the combed surfaces of cinema walls. I would say, therefore, 'No complexity without responsibility' in spite of my plea for enrichment."

"The fact that architecture is an indirect art makes action architecture an impossibility. The only way that the reaction to overplanning can be expressed is by leaving as much as possible to the builder. Although the result is certainly not comparable to action painting it shares with it the denial of responsibility, a passivity and refusal to become involved, a negative use of aesthetic energy. Against the integrated successful hero is set up the passive anti-hero who seeks isolation instead of

Part of the inaugural address by the Architectural Association's President, H. T. CADBURY-BROWN

togetherness and whose study is failure. The only acceptable success is the chance external one, something that 'just happens to you' like the winning of a lottery or being taken up as a television personality. I have examined this approach to life as I think that these Americans, a conscious and articulate group, have formulated their reaction to a situation which to some extent is also common to ourselves. Like them we want to resist the tendency of our time to turn into an admass, to become even more stereotyped and uniform both in our lives and reactions, dull and complex at the same time. Unlike them I believe the way is not through passive withdrawal but through giving the individual opportunities for self expression and identification in his environment."

"But self expression in architectural terms is a practical impossibility. Besides, buildings which fit too closely the idiosyncrasies of a single individual are almost sure to be short lived in usefulness. The self expression to be realized must somehow be provided in a way sympathetic to many people."

"Architecture exists over a span of time much longer than the life of a man and must be more than one man deep. For example, Goodhart-Rendel isolated the Rogue Architects of the nineteenth century, and when we look at their work it is the roguishness which we pass over and the wider implications which we admire, the scale, the vigour, the self confidence. The personalization of their work, a characteristic much admired at the time, was applied too much. A glimpse now of the City of London and we see it applied too little. The spirit of anonymity has become the ghost of a zombie. A further example of our inclination to accept only what is more than one man deep is our relation to Frank Lloyd Wright. A rogue, in the Goodhart-Rendel sense, in his own right an influence we all feel, and, in fact, have absorbed into our philosophy. But at the same time we are not affected by his aesthetics. What we find of value is the motive force of his work, that part which is particularly not one man deep, his interpretation of both Sullivan and the architecture of Japan."

"Therefore one of the aspects of enrichment is based, I think, on continuity and its thread is very similar whether it runs through the *avant-garde* or average people."

"Closely related to this sense of continuity is the relationship of men and buildings over a period of time. One of the ways in which man may feel at one with his buildings is through actual contact, the physical wear of the building. Obvious examples are the steps of many cathedrals, especially the stair to the chapter house at Wells, and the wearing of wood on furniture. Attempts to imitate this fail, like all attempts at literal imitation. In Leeds castle a wide flight of steps was cast in curving shapes but they were unrelated to people and look only crazy. The notorious American architect, Addison Mizner, originated the technique of firing shot into woodwork to simulate beetle. In the Spanish and Moorish castles which he built in Florida for railroad and straight rye kings he had men in hob-nailed boots walk up and down staircases as the cement was setting to imitate the wear and tear caused by the spurs of the Knights of Castile and the Holy Roman Empire previously supposed to have used it."

The most dramatic example of this contact between men and material is to be found in the Lascaux cave. At a point considered to be formally most significant in the cave there is a small vertical shaft and on the face is a handhold smooth and polished. Feeling it one realizes with a shock that it is the result of the continuous use of the cave from thirty thousand until fifteen thousand years ago and it is there for your hand to touch."

The sort of contact which I would advocate is over a much smaller cycle of years. There should be opportunity

Ideas of Disorder

for man to care for his buildings in a way which is spread over several different time rhythms. In medieval architecture and in much nineteenth-century architecture this contact was denied. Solid stone, solid wood in the one, glazed brick and tile and solid wood in the other denied attention. In desperation people imposed themselves by cutting initials on tombs or lavatory doors. But in the seventeenth and eighteenth centuries it was well appreciated. Daily the brass knocker was polished, frequently the window glass, every few years the limited areas of paint were renewed, at much longer intervals the bricks might be repointed or the slates repaired. To me it would seem that we are at the moment in danger of losing this contact. To deny it is not only to lose the interaction but to lose the effect of the interaction. To see Bedford Square repainted is to see it again freshly with a new vision.

"Another way of humanizing environment is through scale, through the making of rich and bold buildings which absorb life. People themselves give richness, as in the theatre or a busy market place. But to absorb this hurly-burly, and make use of it, demands boldness rather than refinement. For within the overall framework of the buildings it seems reasonable, should people live in them, for the person to be able to identify his particular piece. From the point of view of living, I think that within the concept of *Unité*, or the Roehampton *maisonnettes*, there lies a comprehensible image which allows for the further possible identification of the specific home by special treatment of things like trellis plants and sunblinds, a kind of self-expression which is desirable because it is temporary and can be contained by the boldness of the architect.

"Available to us in our search for identification and enrichment are the architectural philosophies of two men, Mies van der Rohe, who, on reflection, seems to have started as a romantic and ended as a classicist, and Le Corbusier, who started as a classicist and seems now to be a romantic. But it is probable that it is ourselves who have changed. Nevertheless, together, their theories dominate our scene.

"Certainly the curtain-walled blocks proliferating in the city show us the way not to go. A steel and glass box by Mies manages by virtue of his personal intensity to be both human and monumental. In the hands of other quite competent architects it seems never to achieve more than the crisp but scaleless and dispassionate qualities of good graphic design. This is not to deny the classic intellectual approach. The best of Mies is to me more sublime than the best of Corbusier. But the difference between Mies and the ordinary run of his disciples is the difference between architecture and advertising layout; the difference between Corbusier and his followers is a quantitative one; they are all making architecture. Mies allows mechanization into the production of his materials, whereas most of those using his theories allow it into the production of their designs as well. Within the apparent rigidity of his discipline, Mies is able, by intense personal

feeling, to give his buildings a humanism more than sufficient to set the individual at rest. But if we remove Mies and substitute a design machine, fed with information from manufacturers and measured by a relentless system of cost control, it is not surprising that the end product seems arid. Life has caught up with the bright ideas of the thirties. The machine produces the structure from one manufacturer and the curtain walling from another. Have we achieved the making of the cage only to find that the magic bird has flown away."

A Four-year Cycle

Mr. Cadbury-Brown's proposal was to adjust the A.A. structure so that the rhythm periods of the four elements of its membership—council, principal and staff, students and members—were better related than at present. Each of these elements, he said, existed in a different time cycle and rhythm. "The council has a yearly cycle influenced by the changes of president and officers, and the election of new members. By tradition it seems to work more on a basis of general agreement rather than by majority voting . . . I would say, therefore, that, accepting a certain overlapping, the time cycle of the council is about one to two years.

"The rhythm of the principal and staff is, however, longer. Appointments may be for several years, some for longer. The curriculum is something which operates over a course of five years and any changes need time to take effect. . . .

"The students are closely related to this rhythm but theirs is perhaps slightly quicker. For the first year or so they are finding their feet and at the end of their five years they are looking farther afield. I would say that the duration of their active participation is about three to four years.

"Then there is the membership which is more amorphous than the other three groups and has perhaps the longest rhythm period. It is related to eras rather than years and is most easily recognized in retrospect—the thirties, pre-war, Mount House, ex-service; or it may be related by the influence of particular movements—the Swedish, Roehampton L.C.C., or perhaps now the *Nouveau Art Nouveau*. These occur at about five- to eight-year intervals."

To achieve this adjustment of the A.A. structure, Mr. Cadbury-Brown's proposal was ". . . to devise a procedure with a time period of four years, longer than that of the council, shorter than that of the membership but nearly that of the school itself, the curriculum, the staff and the students. Four years is a period of time to which the senior teaching appointments could be related, and it would allow for a recognizable cycle within which everyone would be able to comprehend his own position. There would be a time for thinking up new ideas, a time for putting ideas into action and a time for assessing their worth. But it would mean adjustment to the structure of the council. A smaller but longer-lasting school committee would be required which would hold office over the same four-year period, a school governing committee elected by and probably from the council. I make no particular recommendation about its function except to say, generally, that it would be a group available to the principal for advice. To maintain continuity, one of its officers might be changed each year and it could have liaison officers and the staff/student committee to help it. To spend four years on such a committee is not as formidable as it sounds. Most people on the A.A. Council serve at least that amount of time.

"The Council would continue as at present, elected in the same way and with a yearly president. With the school governing committee parallel to it the council would be free to work in a wider field. It could take a much greater part in general architectural matters, perhaps particularly concerning London, and could concentrate more on the activities involving members. It might concern itself with post-graduate work, specialist courses, the continuing education of the membership, and might even be able to embark on special studies."

Roundabout. London-Birmingham Motorway



NEWS

Competition for 250 Flats

The Borough of Halesowen invite registered architects in Great Britain and Northern Ireland to submit designs for development comprising about 250 flats at Highfields, Halesowen, Worcestershire. The assessor for the competition will be Eric Lyons. A first premium of £1,000 and a further £1,000 to provide up to ten other premiums will be awarded. Conditions will be available by mid-November from: Town Clerk, P.O. Box 14, Council House, Halesowen, Birmingham.

"Motorway"

John Laing showed a film last week of the building of Britain's first long-distance motorway—M.1, London to Birmingham. It was in colour, and showed vividly the contrasts in weather conditions, which first hindered and then helped the contractors: tropical sunshine, snow and fog, relentless rain. From the point of view of film-making, these varieties alternated rather obviously in what purported to be the same sequence of earth-moving or whatever. Many shots were taken from the project's resident helicopter and were most striking. You saw, first, the gash of torn earth across the countryside and then by stages the smooth double ribbon of asphalt. The various bridges struck our correspondent as brutal rather than brutalist; surely something more elegant and graceful could have been possible? As the brochure handed out at the showing informed us, Robert Stephenson moved 15,000,000 cu ft of earth to build 112 miles of double-track railway between London and Birmingham, and he did it in four years (1834-38). Laing shifted not quite 16,000,000 cu ft of earth to build 55 miles of motorway (with its appurtenances, equivalent to eight lines of railway track) in 19 months.

I.L.A. Presidential Address

Frank Clark, who succeeds Sylvia Crowe as president of the Institute of Landscape Architects, took education as the subject of his presidential address. The I.L.A. has recently overhauled its examination syllabus and Mr. Clark said that the institute was vitally concerned, not only with improving the quality of new entrants into the profession, but also to improve standards within the profession itself and so convince the public of the usefulness of the landscape architect.

The situation was very serious. The only full-time university graduate course at Reading was to be discontinued and after 1962 there would only be the one-year post-graduate course at Durham, the two-year evening course at London University, and the three-year evening course at Leeds. There were also lecture courses at the Northern Polytechnic and Liverpool. This was nothing like enough, even though there were encouraging developments at Edinburgh, where he had himself just joined Professor Robert Matthew.

The time had come for a thorough reappraisal of the profession in order to be able to convince charitable trusts that landscape architecture is a profession with a future. In the inter-war years there was a similar lack of support for artists and planners and yet they were now in considerable demand. This might well be repeated with landscape architects.

Unfortunately the profession did not stand high in public esteem. There was no contemporary Kent, Brown, Repton or Olmstead, although there were agencies such as T.V.A., the U.S. National Parks Service and our own new towns which had provided great opportunities and done something to redeem the situation. But it was tragic that our own National Parks Commission did not recognize the usefulness of the profession.

The new towns were nearly completed, and in three to five years their landscape architects would be looking for other jobs. There might be opportunities in county plan-



Top, Monico site, Piccadilly, redevelopment.
Below, new meteorological office, Bracknell

ning departments and with city architects, some of whom already employed landscape architects. And there was a need for more chief parks officers with local authorities. The I.L.A. and the Institute of Park Administration would have candidates for such posts which would co-ordinate the design and administration of open spaces in a single department.

Belfast City Architect Appointed

From a short list of six applicants, J. H. Swann has been appointed city architect of Belfast at a salary of £3,555 a year.

London's Piccadilly Circus Development

The Legal & General Assurance Society Ltd., in conjunction with City Centre Properties through a development company, Island (Piccadilly) Development Ltd., are going to build shops, restaurants, exhibition space and offices on the old Monico restaurant site (north side, Piccadilly Circus) bounded by Glasshouse Street, Denman Street, Sherwood Street and Shaftesbury Avenue.

A 13-storey tower block will rise 172ft above street level and contain offices. The base of the tower is surrounded by two- and four-storey buildings containing shops and stores on the ground and first floors and restaurants on the second floor. Exhibition rooms and assembly rooms will occupy the third floor. The developers have bought Moon's garage in Brewer Street to provide garage accommodation.

The architects are Cotton, Ballard & Blow and

Messrs. J. G. L. Poulson (F. Booth, partner in charge) are consultant architects. The total cost, including purchase of site, demolition, and the new building, is not expected to exceed £7,000,000. The structural engineers: Scott, Wilson, Kirkpatrick & Partners. Quantity surveyors: Gardiner & Theobald.

New Meteorological Office, Bracknell

The foundation stone of this new meteorological office for the Air Ministry, at Bracknell, Berkshire, was laid last week by Sir Cyril Hinshelwood, president of the Royal Society.

Three interconnected blocks are grouped round a central grassed court. The five-storey building will contain administrative offices, conference rooms, library, main entrance hall and dining rooms. The three-storey block on the opposite side of the centre court will accommodate the instrument division. The eight-storey block, linking the two lower blocks, will house the forecasting and research divisions, communications and training school. Construction will be of reinforced concrete. The project was designed by the Ministry of Works. (See picture, page 391.)

Paisley Town Centre Going Ahead

An extensive development plan for Paisley Town Centre has been approved in principle by Paisley Town Council. The site is bounded by Glasgow Road, Smithhill Street, the railway viaduct and Gilmour Street. The White Cart River will be covered over to form a central piazza running through the new development. There will be a new hotel, theatre, shops, supermarket, motor showroom, office buildings and a car park accommodating 250 cars.

John MacGregor, burgh engineer and town planning officer for Paisley, prepared outline proposals for the development two years ago and a number of companies were asked to submit plans. Approval was given to those submitted by Scottish Site Improvements Ltd. The architect for the development is Leslie C. Norton.

Second Annual Seminar of the Recognized Schools of Architecture

The second annual seminar of the recognized schools of architecture, held at the Royal West of England Academy, Bristol, last week, differed from the original intention of these seminars and was organized in conjunction with the R.I.B.A. Cost Research Committee, so that the representatives of the schools could consider if, how and when problems of cost control and management should be introduced into the schools' syllabuses.

Professor Harper suggested that there were six questions the conference should examine and try to answer:

- (1) Did it approve the recommendations of the Sundridge Park Tripartite Management Conference in relation to architectural training that, (a) simple exercises should be introduced in the first three years of the student's training? (b) introductory lectures on management principles should be given in the fifth year with post-graduate training and evening courses immediately after qualifying in conjunction with other members of the building team?
- (2) Was the traditional emphasis upon "creative design" in the schools of architecture conducive to giving the young student a disciplined attitude of mind towards management?
- (3) What modifications could be suggested to improve the relationship between attitude required for design and for management during the student years?
- (4) Could suggestions be made, assuming that a suitable background atmosphere is created, on methods by which simple management exercises can be introduced? What should their number, content and timing be?
- (5) Would cost awareness and matters of value form suitable introductory subjects for general management techniques?
- (6) What problems of organization, accommodation and staff in individual schools might arise if proposals were strongly followed?

The conference divided into three groups, led by Denis Harper, R. Baden Hellard and J. M. Austin-Smith, and resulted in a surprising unanimity in answer to a number of these questions. There was no doubt that the introduction of the whole technique of cost control and management was a necessary discipline for the architect's training, but that this did not mean the addition of further subjects in the curriculum.

Summing up, Professor Harper said it was obvious that the schools were not satisfied with the standard of entry, and the implementation of the findings of the Oxford Conference should correct this.

It must then be recognized that the largest percentage of the trainees in the profession would always occupy subordinate executive positions, and not be able to practise as a *prima donna* or *maestro*-like character, for the demand made upon the architect by society is beyond the individual's capacity. It was necessary, therefore, to train the general level of future professionals to a high standard of competence, and to introduce them to the full range of their responsibility in managing the client's affairs. The conference had shown up the inadequacy of staffing schools of architecture with architects who were not sufficiently in touch with practice. Architects who tried to function as one-man-bands out of term, and out of school hours, were not able to practise satisfactorily for this very reason, and, therefore, could not be expected to maintain the right contact with either practice or education. It had become obvious that analysis of every design problem should be made in the schools before the design work on it commenced. By a reorientation of these programmes with the examination of the brief by practising architects, a more realistic exercise would result.

The conference agreed that such work as was going on in various schools should be written up and circulated through the R.I.B.A. to all other schools, so that in this way developments in these new techniques would be universally encouraged. The Royal West of England Academy—the host school—offered to provide this documentation of a current project.

The following representatives attended: R. Baden Hellard (chairman), J. M. Austin-Smith, Professor J. V. Connolly, Professor Denis Harper, Bernard Heaphy, V. H. Johnson, J. Nisbet, W. J. Reiners. Representatives of schools of architecture: Clive Browning (R.W.A., Bristol), Chessor Matthew (Dundee), F. Chippindale (Leeds), P. F. Crofts (Birmingham), E. F. Davies (Aberdeen), Prof. D. Fitzgerald (Dublin), J. S. Foster (Regent Street Polytechnic, London), Gordon Graham (Nottingham), Victor Jackson (Sheffield), Frank Jones (Liverpool), William Kretchmer (Cardiff), Alex McRobie (Edinburgh), John Ollis (Bristol), R. E. Owen (Oxford), D. S. Paterson (Glasgow), T. Ritchie (London University), H. E. Strutchbury (Manchester), John W. Wright (Portsmouth), Evelyn Freeth (R.W.A., Bristol, *ex officio*), P. Nightingale (Hammersmith).

Coming Events

The Royal Institution of Chartered Surveyors.

November 9, at 5.45 p.m. The president will deliver his presidential address at the first ordinary general meeting. At 12 Great George Street, Parliament Square, S.W.1.

B.B.C. Network Three: "Building Matters".

November 10, at 7 p.m. Walter C. Moss will deal with improving the efficiency of thermal insulation in building. Bruce Martin will discuss modular co-operation.

The Housing Centre Trust.

November 10, at 6 p.m. Redevelopment schemes for the Angel, Islington, and the Medway Towns. At 13 Suffolk Street, Haymarket, S.W.1.

South-West Essex Technical College and School of Art.

November 11, 7.30 p.m. Annual ball of the Department of Architecture and Building. Tickets from Miss Enid Lucas, the secretary. At the College and School of Art, Forest Road, Walthamstow, E.17.

RAILWAY ARCHITECTURE

Photos: HENK SNOEK



The railways are in process of change. What was sometimes nostalgically considered unchangeable is undergoing modernization, and the beginnings of this movement are to be seen in every aspect of British Railways. Here we are primarily concerned with architecture and this is taking on a "new look": well illustrated in the jobs which follow. The subject is too big for one issue. This time we are mostly concerned with prefabricated stations in the Manchester area. The investigation will be continued in a future issue

BRITISH RAILWAYS ARCHITECTURE

Introduction by Dr. F. F. C. CURTIS,
Architect, British Transport Commission

DURING a long period prior to the nationalization of British Railways no major project of station reconstruction had been carried out in this country and, moreover, maintenance of existing stations had been reduced to a minimum, due to the war and the continuing shortages and restrictions after it.

Very little money was made available for new works during the first five years after nationalization and, compared with the railways in other European countries, British Railways had to make do with antiquated installations, especially buildings. Nevertheless, there was never a complete standstill of forward planning, and already before the comprehensive railways modernization plan had been drafted, design work on many individual reconstruction projects had been started. Gradually the strength of the architects' offices was built up to cope with the increasing volume of work, and care was taken to bring in the kind of persons who would seek a fresh approach to the tasks before them, conscious that the railways had to enter a second pioneering age or become defunct.

The management welcomed the introduction of an entirely new conception of railway architecture, and as more and more of these new projects are being carried out, the travelling public cannot fail to become aware of this great change.

The railways are far more decentralized than is generally acknowledged, and if there is a family likeness among the buildings and projects illustrated in this article, this is more due to a common aim than to central direction.

On the other hand, the obligation to provide the same standard of service throughout British Railways naturally led to the formulation of certain basic requirements which must be met wherever a new station is built, even though the decision as to how they are met is left to the region.

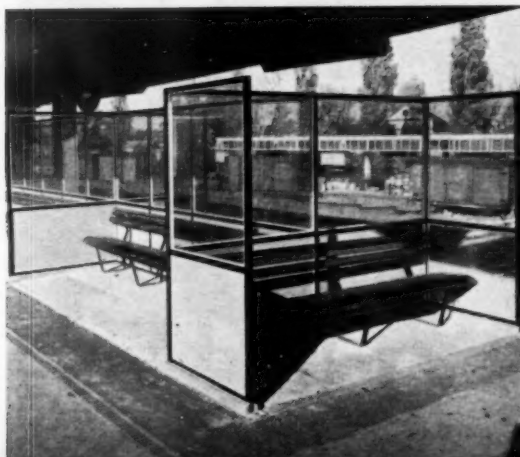
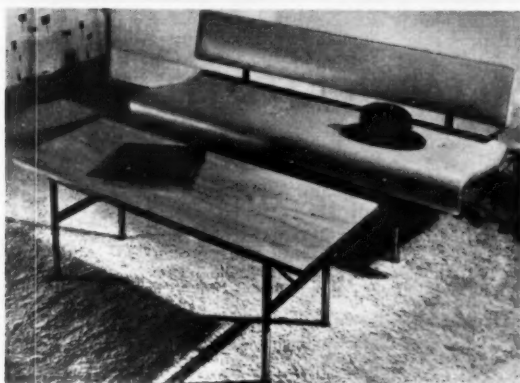
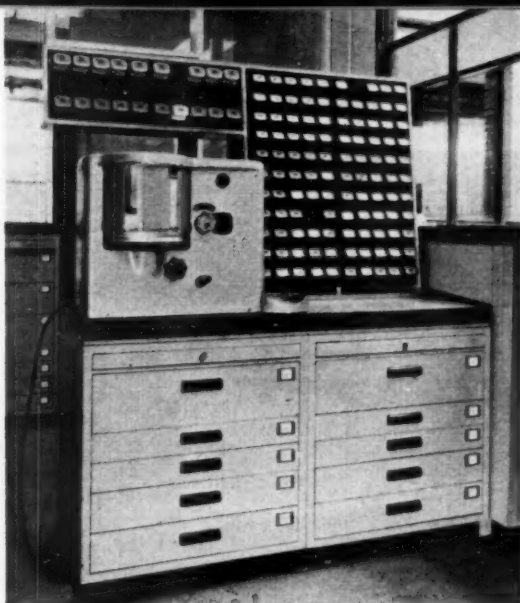
In developing their own standards, British Railways did not overlook the lessons to be learnt from the continental railways and, quite apart from officially undertaken studies of new stations abroad, close personal links now exist between railway architects in this country and their colleagues on the Continent, kept alive by periodical mutual visits of a whole office to an office in another country.

The design of new station buildings extends into the field of engineering and industrial design as far as equipment is concerned, and attention has also been given to the design of station furniture. Standard designs have been developed for the arrangement of ticket racks, ticket machines and storage units in booking offices, as well as for the ticket windows and booking-office fronts, including such features as lighting, information signs and advertising displays. Furniture for waiting rooms has been specially designed for the Eastern Region in collaboration with Robin Day, and this has since been used in other regions. Studies are going on into specialist requirements of such structures



Two shots taken from Wilmslow station (above) and at Heald Green (illustrated on page 401) show electrification plans coming into effect





Some of the items mentioned in the introduction are illustrated, left. 1. Standard steel equipment for traffic offices. The Flexiprinter unit, mechanized ticket office. 2. Furniture for the Eastern region, designed by Robin Day. The settee has a metal frame with red vynide upholstery. 3. A ticket window at Norwich Thorpe station. 4. Station furniture at Potters Bar

as signal-boxes, platform shelters and other typical railway buildings, of which large numbers are constructed every year. In one region engineers and architects competed in preparing a new design for a standard prefabricated footbridge. In another a system of prefabrication has been developed for the construction of small stations along a line in course of electrification. The system is flexible to allow maximum adaptation to varying site conditions and local requirements, and enables the construction team to erect the complete carcass of a new station during a few hours, eliminating as far as possible all interruption of traffic on the line.

Railway stations are focal points in the town or country area they serve, and their layout, especially their approaches, as well as their architectural design, must be integrated into urban or rural plans covering a wide area. Close collaboration with the planners of local authorities is in itself nothing new, but it will be seen in the course of the next five or ten years how an enlightened approach on both sides and a common outlook on building for the future can transform the dingy railway landscape.

ARCHITECTS AND CONSULTANTS CONCERNED

with jobs illustrated in this issue

MARSH LANE AND STRAND ROAD

Regional architect: W. H. HAMLYN. Principal assistant architect: LESLIE MARTIN. Senior assistant architect: R. LLEWELYN DAVIES. Under the general direction of W. K. WALLACE, chief civil engineer. All late of the London Midland Region.

PREFABRICATED STATIONS

Architect: W. R. HEADLEY, regional architect. Principal assistant architect: J. S. WYATT. Development group: P. de SAULLES, T. A. SNOW, and P. NEWTON. Production group: D. GOLDHILL and M. WHEELER. Under the general direction of the chief civil engineer: A. N. BUTLAND, London Midland Region. Consultant engineer for roof: THE TIMBER DEVELOPMENT ASSOCIATION LTD. (Heald Green Station. Architect in charge: C. PACITTI.)

SANDBACH SIGNAL BOX

Architect: W. R. HEADLEY, regional architect. Principal assistant architect: J. S. WYATT. Senior assistant architect: E. T. CLARK. Assistant architect in charge: P. E. SHARP. Under the general direction of the chief civil engineer: A. N. BUTLAND.

OXFORD ROAD STATION, MANCHESTER

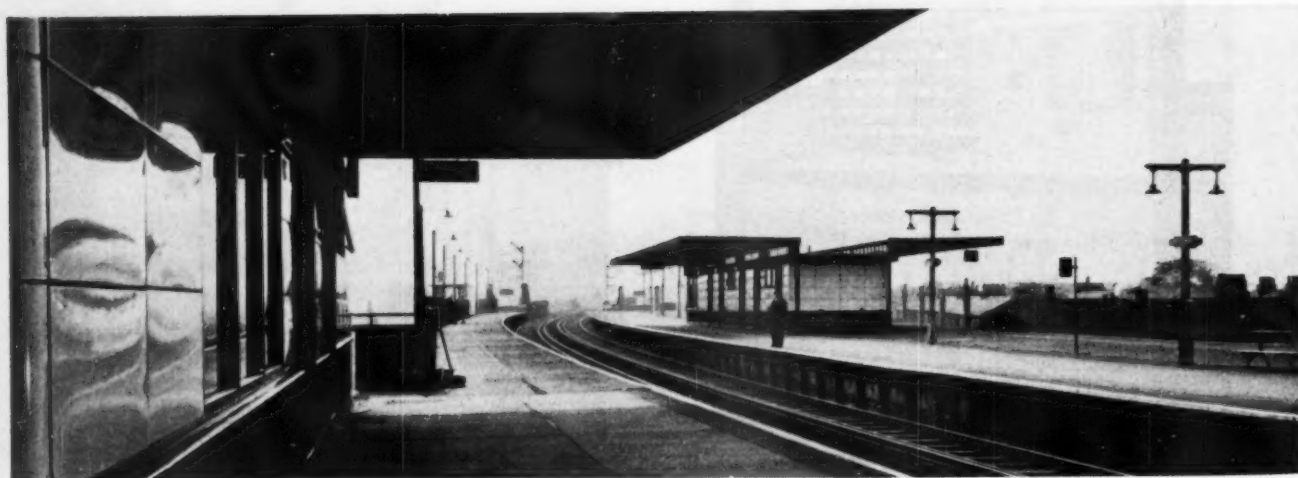
Architect: W. R. HEADLEY, regional architect. Principal assistant architect: J. S. WYATT. Senior assistant architect: D. GOLDHILL. Assistant architect in charge: M. CLENDINNING. Under the general direction of the chief civil engineer: A. N. BUTLAND. Consultant engineer for roof: THE TIMBER DEVELOPMENT ASSOCIATION LTD.

HARLOW STATION

Architect: H. H. POWELL, regional architect. Chief assistant architect: R. G. WALTERS. Assistant architect and group leader: PAUL HAMILTON, under the general direction of A. K. TERRIS, chief civil engineer.

PLYMOUTH STATION

Architect: H. E. B. CAVANAGH, regional architect. Under the direction of M. G. R. SMITH, chief civil engineer, Western Region. Consultant engineer: A. E. BEER.

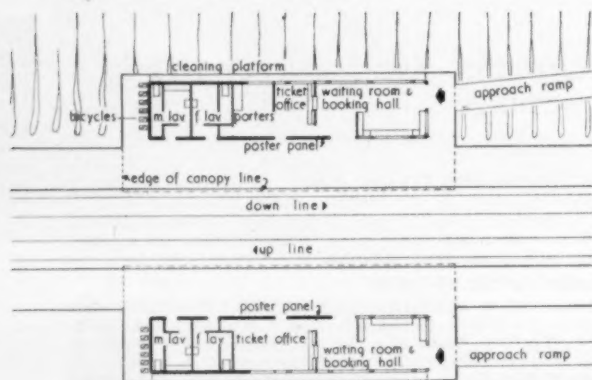


THE PREFABRICATED STATION



EAST DIDSBURY ELEVATION. SCALE: 1 IN=32 FT

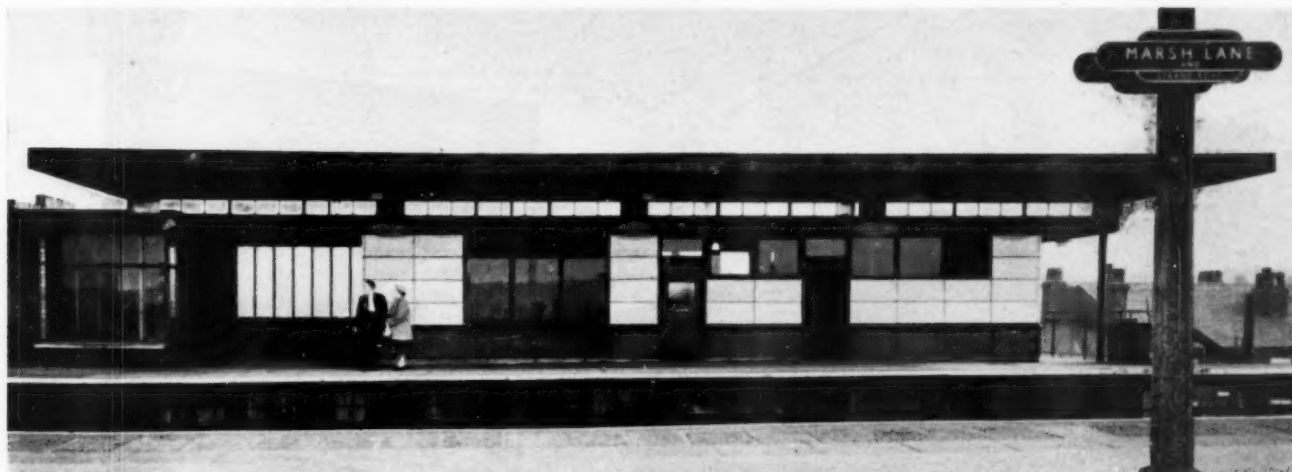
PLAN. SCALE: 1 IN=40 FT



EAST DIDSBURY

East Didsbury station is on the Styal line and was completely reconstructed as the result of track raising and alterations connected with the electrification. The building is prefabricated, using a Mod-X steel frame clad with hardwood framed composite vitreous enamelled iron, glass and Eternit panels. The overall roof which is extended to platform edge to form the canopy was designed in the architect's office with the object of achieving extremely rapid erection to avoid interference with traffic and passengers. Below, the station approach





Above, and on facing page, Marsh Lane and Strand Road station. Built in 1948, this station was a forerunner of the prefabricated stations illustrated below and on following pages

LONDON Midland Region have developed a system of prefabrication for the rebuilding of several stations on the Manchester-Crewe electrified line.

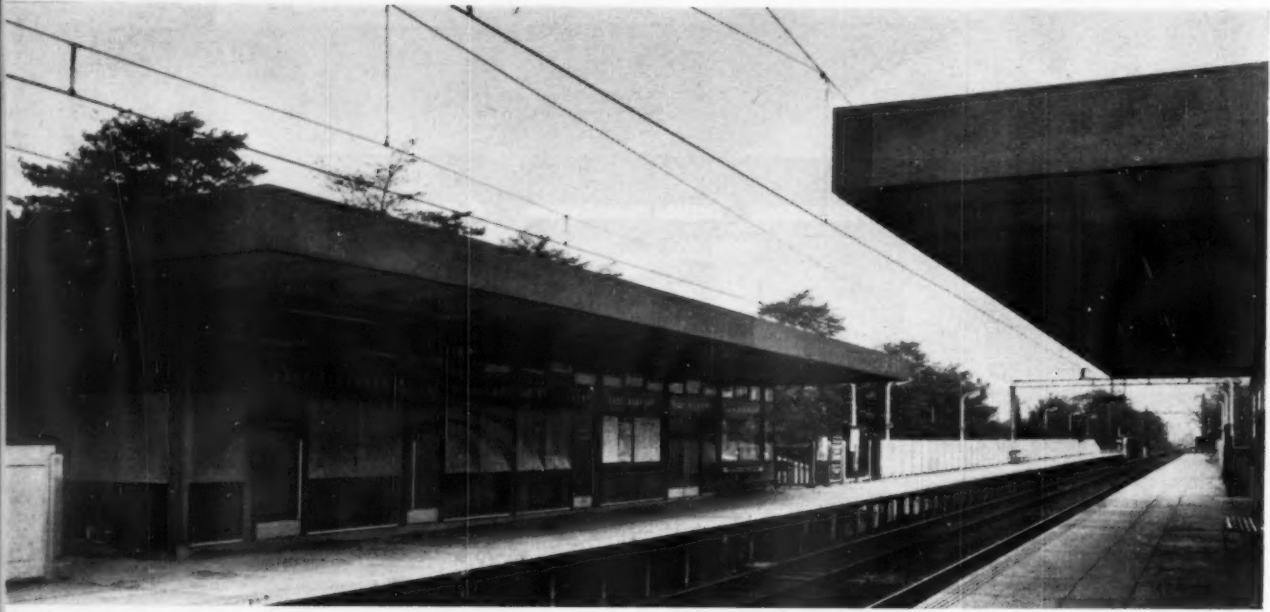
Early in 1957 it was realized that the modernization and electrification of the main line from Euston to Manchester and Liverpool would automatically result in an appreciable amount of station rebuilding. A development group was, therefore, formed in the regional architect's office to study the problem.

The immediate problem was to rebuild the stations at Burnage and East Didsbury, on the Styal line between Manchester and Wilmslow, within a year. It was decided to treat these two stations as prototypes for the prefabricated system and, in view of the short time available, a proprietary modular steel frame was chosen for the structure. Research was concentrated on the development of suitable cladding panels, partitions, roof units and other elements. Experience gained from this Mark I system was immediately applied to the development of the Mark II system, in which all elements were specially designed.

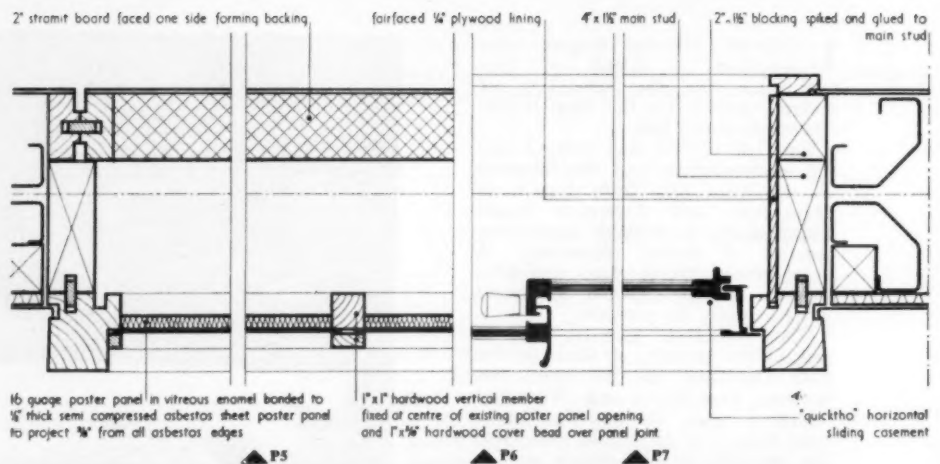
The first building in the Mark II system is the small waiting shelter at Heald Green. Others which will commence shortly include the total reconstruction of the stations at Sandbach, Chelford and Holmes Chapel, a booking office and waiting room at Mauldeth Road and a waiting shelter at Goostrey.

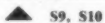
The Mark II system, which is planned on a 40in module, consists of four main dry constructed elements: aluminium structural frame, roof units, external wall panels and internal partition units.





Above and below, a general and detail shot of the new prefabricated station on the Styal line. Detail is shown on the facing page. Roof units consist of stressed skin triangular section plywood box beams spanning from front to back and cantilevering nearly half their width. The roof was made in modular units loaded on to flat cars and erected by loco crane in one day





40" module line

column cover board to match backing screwed to backings with 1/2" N°6 dome headed countersunk phillips screws @ 9" c.c.

standard col

1/2" panel (fixing at 3" centres)

1/2" eternit i.c.c. blue black sheet screwed to strutting

expandite strip set in 1/4" x 1/4" rebate prior to fixing cover strip

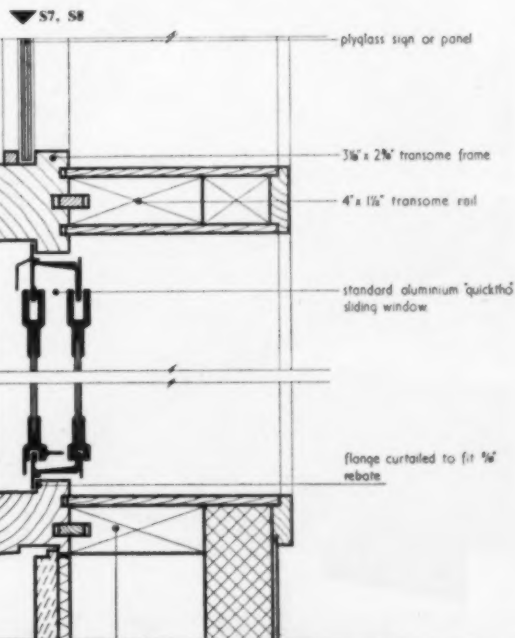
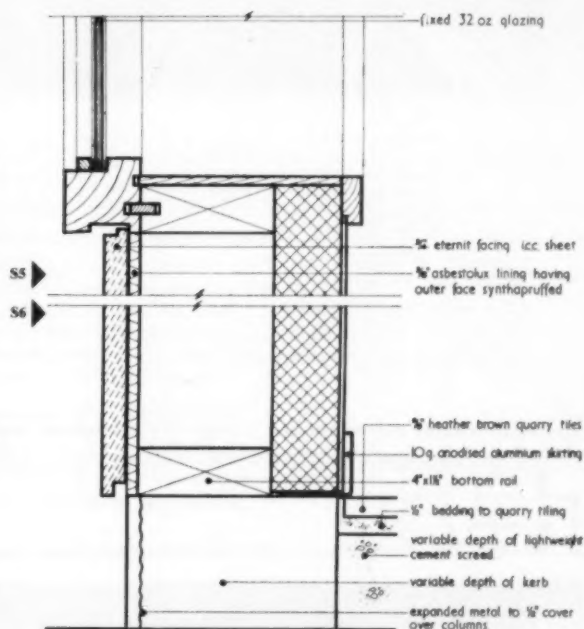
1 1/2" x 3/4" hardwood cover strip

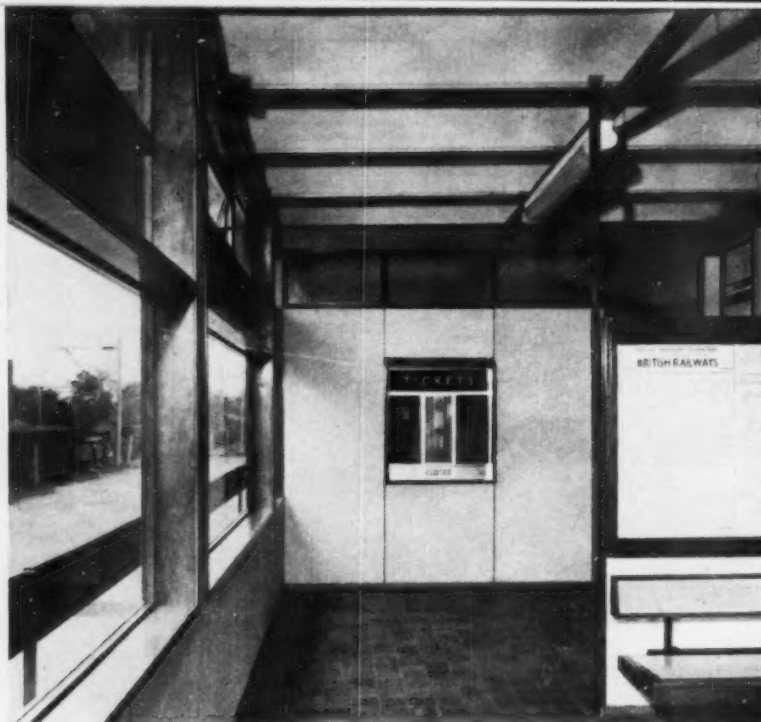
40" module line

1 1/2" N°8 countersunk rustproof screws

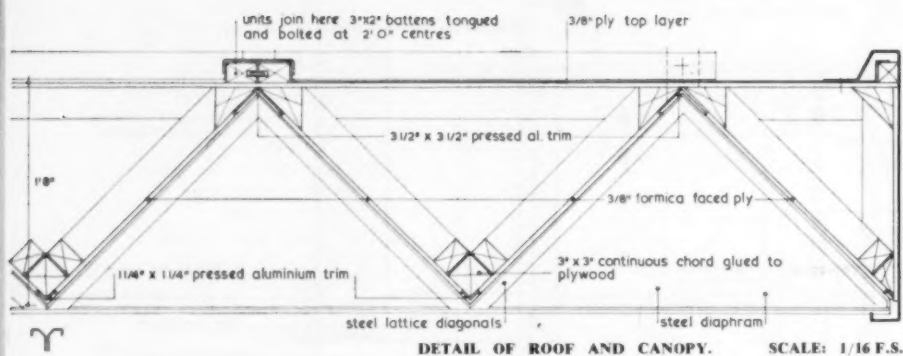
this panel to be fixed first - then the cover strip - followed by next panel - corner cover strips to be last

Architectural drawings of a building facade showing two elevations. The top elevation is a side view with a total width of 31'-0" and a height of 10'-2". It features a 24 oz. quicktho panel, a plyglass nameplate or plain panel, plate glass, solid poster panels, a door opening, and 32 oz. panels. The bottom elevation is a front view with a total width of 31'-0" and a height of 10'-2". It features a 24 oz. quicktho panel, a plyglass nameplate, a 32 oz. quicktho sliding window, a quicktho sliding window with a pin-up board on inside, and solid poster panels. Both elevations show 1/2" eternit slabs on studding.

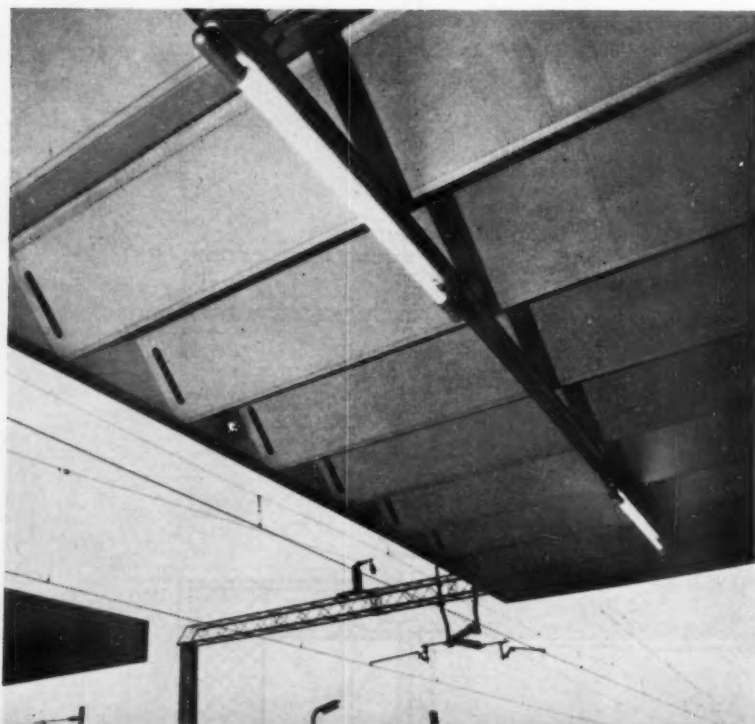




The ticket office



Underside of canopy with lighting units



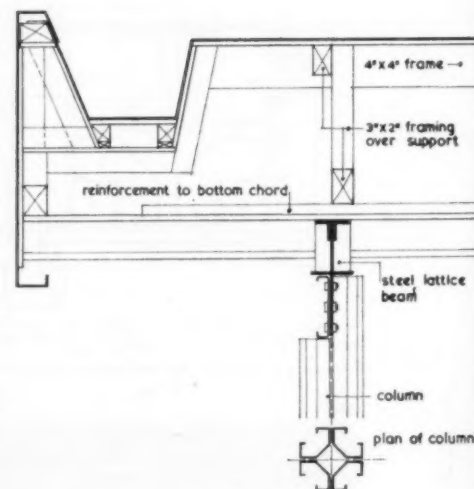
Continued from page 397

The aluminium structure consists of a pin jointed frame of cruciform section columns and rectangular beams. Both columns and beams are built up by fixing two extremely light extruded sections together to form the complete section.

Although the structure is pin jointed and theoretically braced by the external wall panels, there is sufficient rigidity in the connections to allow the frame to be stable until these are fixed.

The possibility of using a system in which loads are carried directly on the wall panels was considered, but the need for free-standing columns supporting extensions of the roof to form awnings, and the heavy cantilever roof loadings frequently encountered indicated that a separate frame would be more flexible in application.

Roof units are of two types, cantilevered awnings and infill. The cantilever type is materially the same as that used successfully in the Mark 1



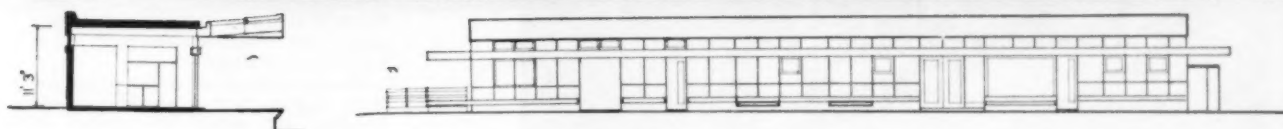
EAST DIDSbury

General Contractors:

E. B. JONES & RAWLINSON

Sub-contractors and suppliers:

Aluminium Fascias, Pipes and Facings, etc.: Templewood Hawkesley Ltd. Aluminium Windows: Williams & Williams Ltd.; Quicktho Ltd. Cycle Stands: Le Bas Tube Co. Ltd. Doors: Veneercraft Ltd.; Tinker & Young Ltd. Floor Tiling: Conways Ltd. Furniture: Esavian Ltd. Glass Signs: Pugh Bros. Ltd. Ironmongery: Stedall & Co. Ltd.; A. G. Roberts Ltd. Plyglass Signs: Plyglass Ltd. Roofing: Ruberoid Ltd. Roof and Awning Units and Wall Panels: Tinker & Young Ltd. Sanitary Goods: Broad & Co. Ltd. Steel Framing: Mod-X Structures Ltd. Ticket Windows: Hygiaphone Ltd. Vitreous Enamelled Iron Poster Panels: National Enamels Ltd. Vitreous Enamelled Steel Facing Panels: Vitreous Enamelling Works.



Heald Green station was originally a red brick structure with a flat roof and stepped parapets. Owing to changing operating conditions experienced under electrification it was necessary to extend the building by almost its own length. Because of the difficulty of harmonizing the new work with the old it was decided to remove the parapets and reconstruct and extend the canopy. An aluminium fascia now extends round the perimeter of the existing building and new canopy. The whole building is clad with swaged vitreous enamelled sheet steel panels and is now indistinguishable from a completely new building. Below, the waiting shelter is constructed in the new Mark II prefab system

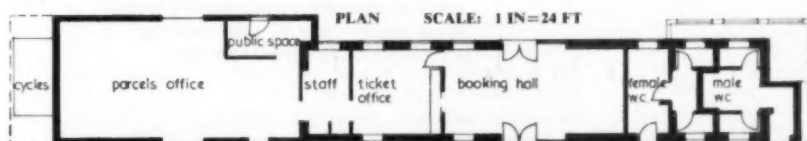
HEALD GREEN

system and consists of a series of triangular section stressed skin plywood box beams. The roof rests on the top of the structural frame and cantilevers from it. Heavy loads on the beams are resolved by making the upper surface of the roof from the top chord of a deep truss, the lower chord of which is the normal aluminium beam.

The infill unit rests within the depth of the aluminium beams and consists of simple hollow stressed skin punts constructed of timber and plywood.

Either type of roof can be used on its own or the two types can be used in combination.

External wall units have to be strong enough to brace the aluminium frame and at the same time be light enough to be easily handled. They must be faced externally with robust materials to stand up to the rough usage normally experienced at railway stations. These requirements were met by designing the panels as stressed skin units, similar in principle to hollow flush doors, with internal



Continued from page 401

timber spacing members. The outer skin is of coloured reinforced polyester resin sheet. Reinforcement is glass fibre in combination with expanded metal where heavy impact resistance is required and glass fibre alone where conditions are more normal. The inner skin can be of various types of building board to suit the requirements of the plan.

An attempt has been made to allow the maximum diversity of panel or walling form within a structural framework which, although constant in detail and appearance, may vary in bay proportion. It is hoped that this inherent flexibility will avoid the monotony, sometimes euphemised as "discipline", which is often found in prefabricated systems.

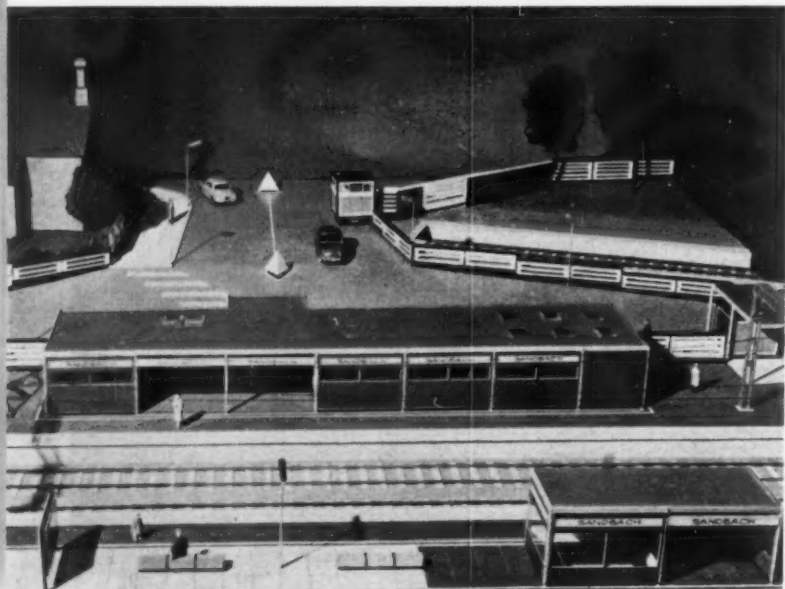
Such discipline as does occur is essential to the proper functioning of the parts and has the additional advantage of establishing a consistent vernacular for small stations. The old Midland Railway succeeded in establishing such a vernacular, although the former London and North-Western Railway strangely lacked any consistent character in its Victorian buildings.

The electrification of the main line from Euston seems an appropriate occasion on which to attempt to create a new and consistent architectural expression in keeping with the spirit of the modernization plan. Functional variation in the planning and siting of the new buildings will avoid monotony while the consistency in detail and trim may have the effect of creating a "house style" for the largest region of British Railways. Contractors for Heald Green: E. B. Jones and Rawlinson.



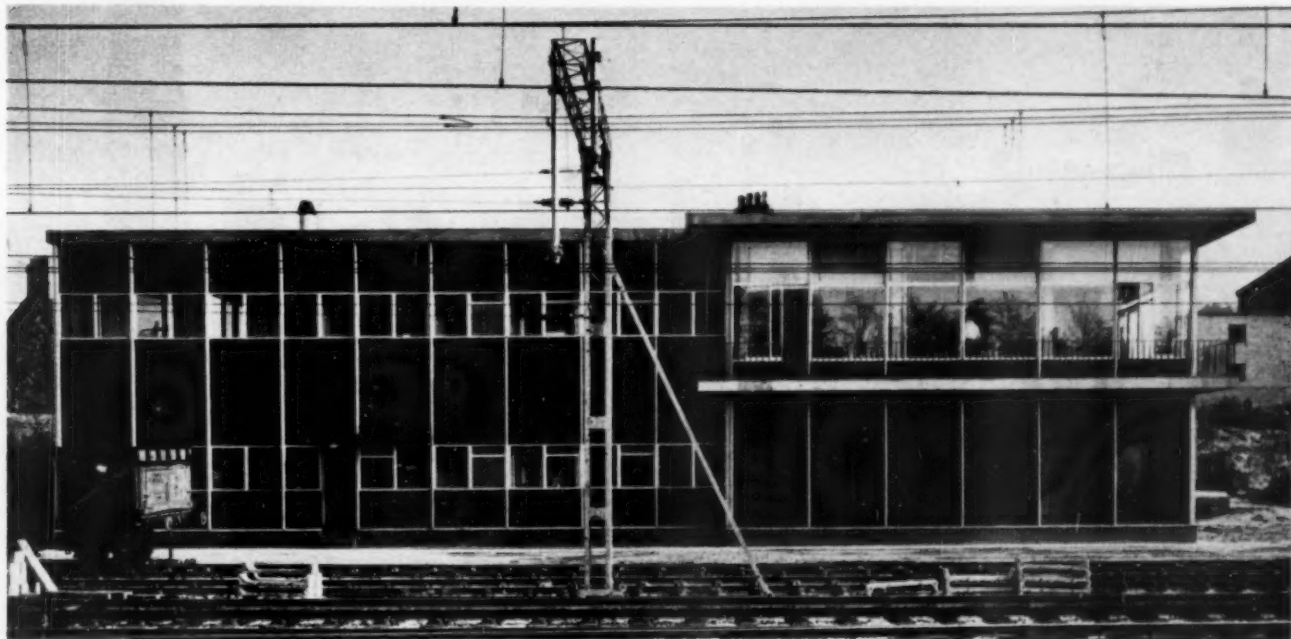
Above, the station entrance. An aluminium fascia and sheet steel cladding panels successfully "marry" the existing building with the new extension

HEALD GREEN

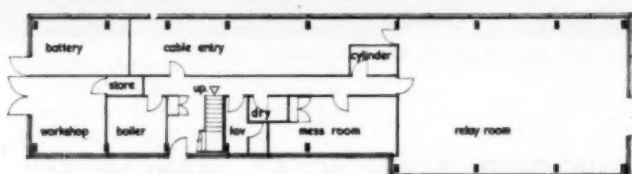


SANDBACH

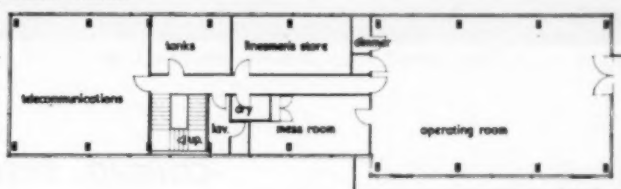
The model shown left illustrates the projected Sandbach station on the Crewe to Manchester line. As with other prefabricated stations in the main line electrification, a good design has been combined with permanence and easy maintenance. Little or no repainting will be necessary; the buildings retain their appearance permanently by occasional washing down



GROUND FLOOR SCALE: 1 IN = 28 FT



FIRST FLOOR

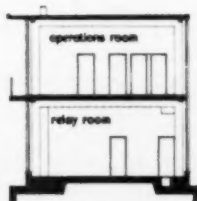


SANDBACH SIGNAL BOX

THIS signal box forms part of British Railways modernization proposals in the Manchester area. This building is specially designed to house the most modern signalling equipment and is intended to express the contents in terms of modern architecture. Speed of erection was a key requirement in order to fit in with other work related to the electrification of the permanent way.

Construction and Finishes

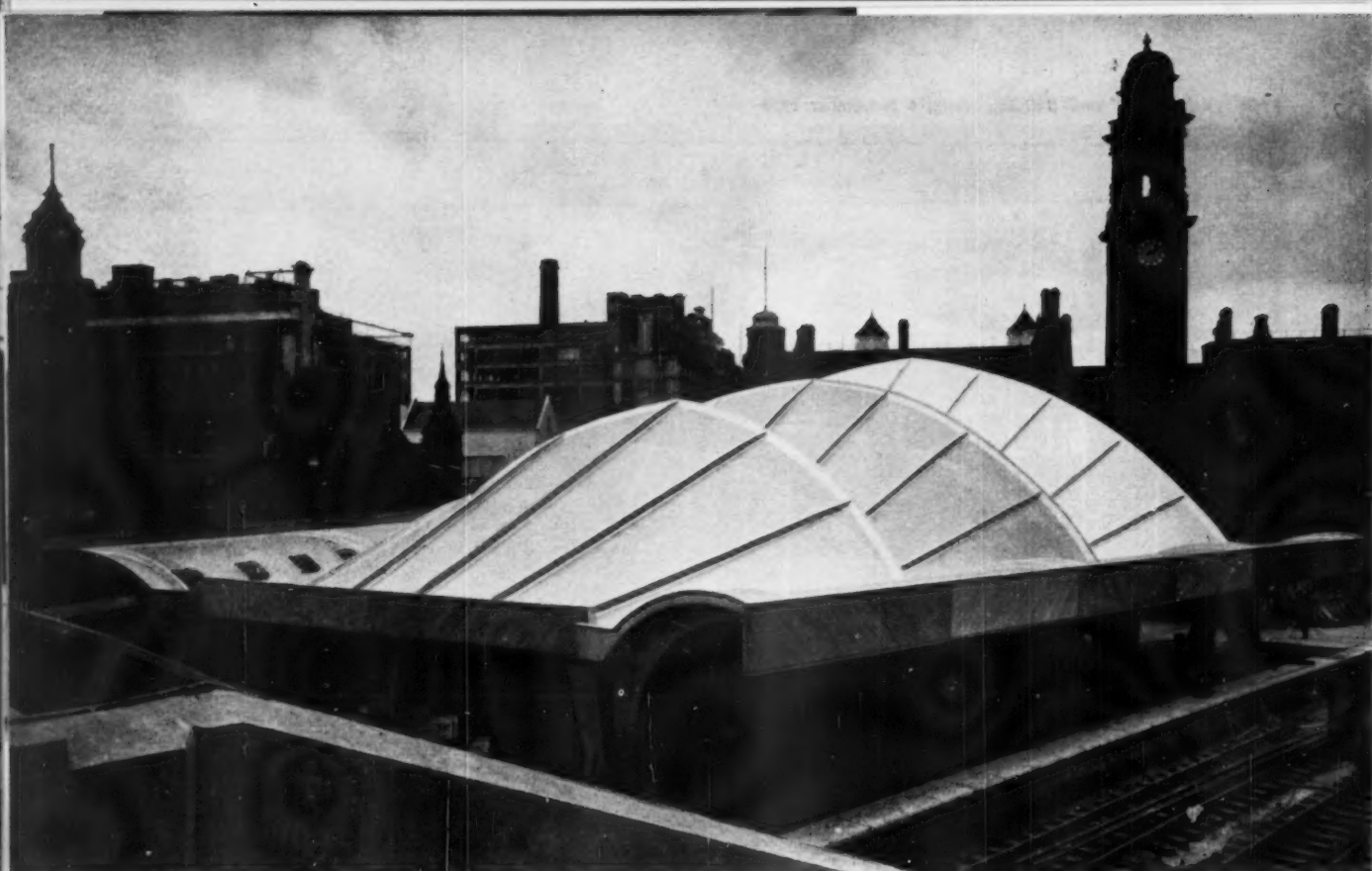
Bearing in mind the limited time factor a system using prefabrication principles was decided upon (steel framing and window walling), the infilling panels being made up of two layers of compressed asbestos enclosing a core of fibreglass and aluminium foil. The building being largely factory prepared, site delays due to weather conditions were reduced to a minimum.



CROSS SECTION

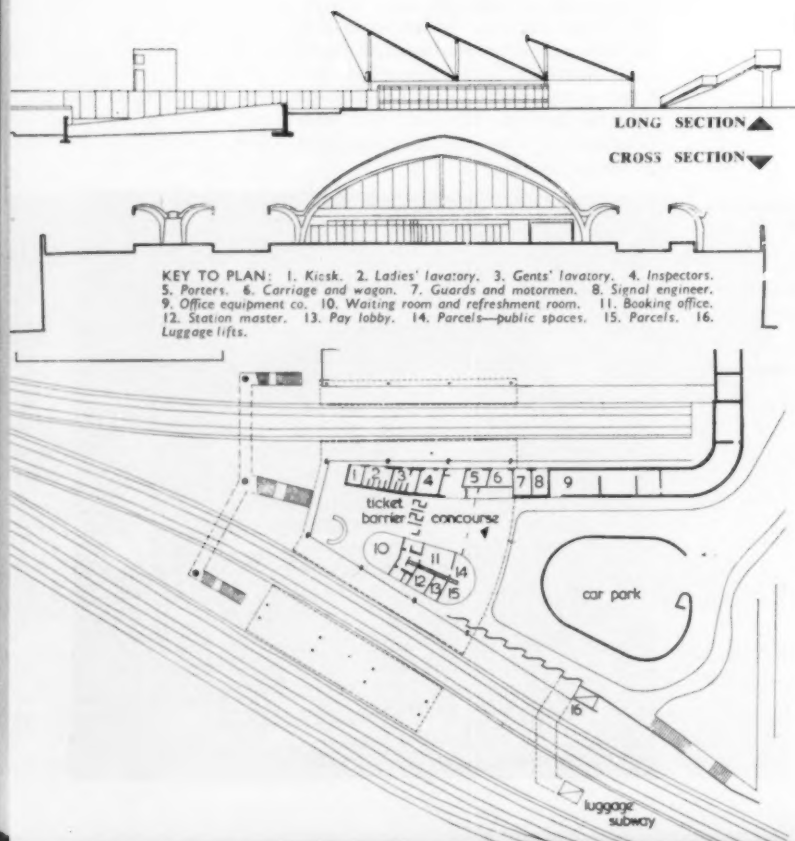
Constructed in a prefabricated system, this signal box was completed in half the time normally required with traditional methods. Venetian blinds are fitted in the control room in order to vary the daylight intensity. A sound-proof ceiling is provided to reduce noise as far as possible.





Silver conoid shells covering the new Oxford Road station add new charm to the Manchester skyline

CONOID SHELL ROOFED STATION AT MANCHESTER



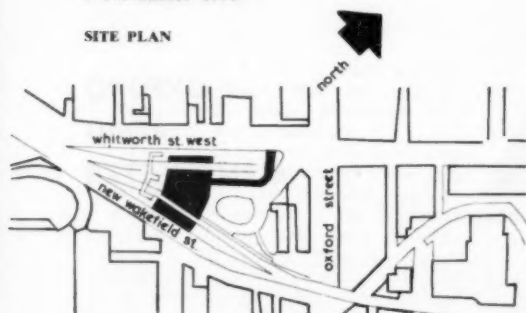
OXFORD Road station, Manchester, is being rebuilt as part of British Railways' modernization programme. The station concourse, containing ticket office, inquiry office and waiting and refreshment rooms, is on a tapering site and is to be covered by a dramatic "umbrella" consisting of three conoid shells. This form of construction is easily adaptable for a triangular site and, in addition, allows uninterrupted floor space and good natural lighting.

Construction

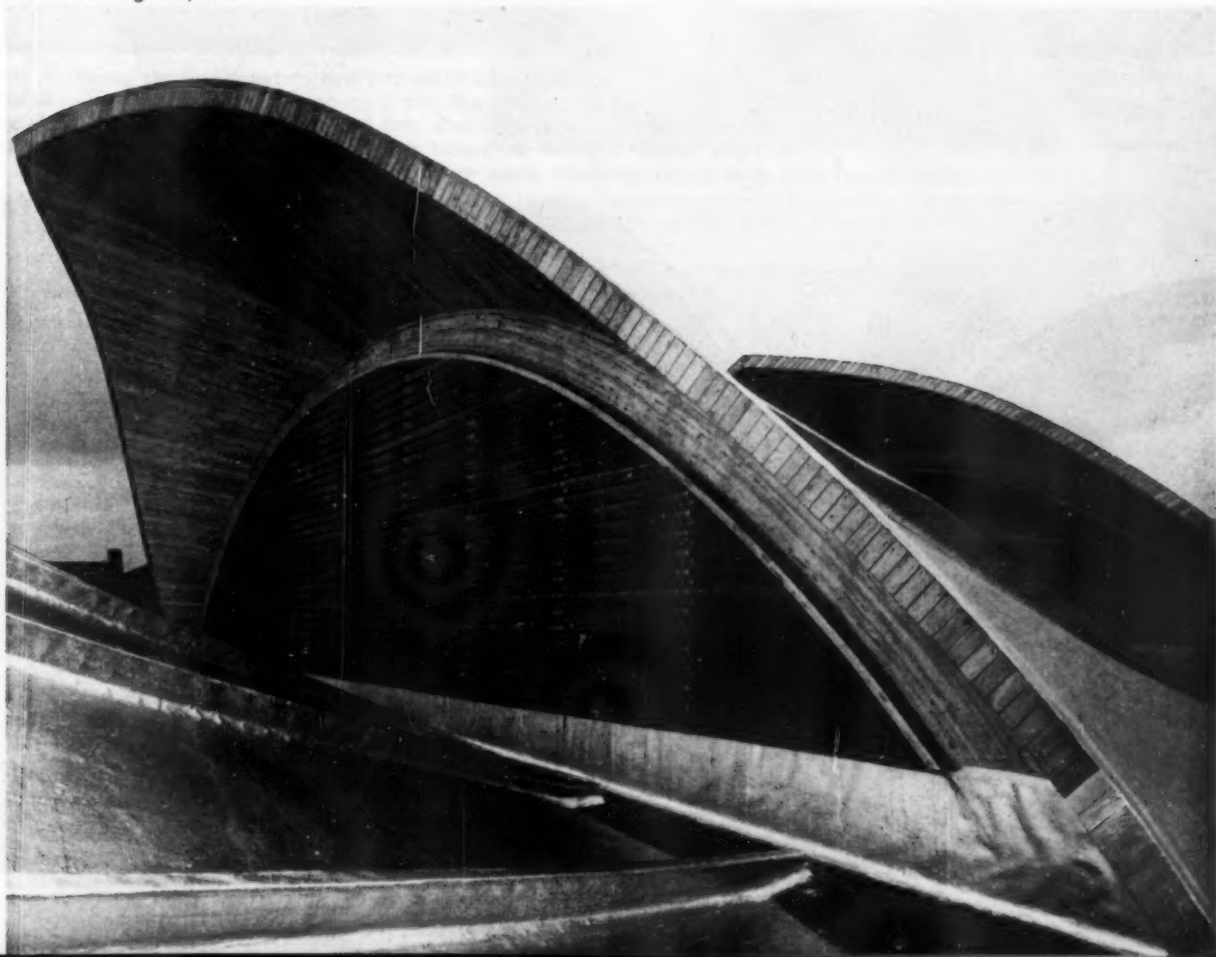
The three conoids range in width from 97ft 3in maximum to a 41ft 6in minimum. These shells, which are being constructed on site, are made up of three layers of tongued-and-grooved boarding, nailed and glued. Laminated arches and ties are being prefabricated as complete units. Timber was chosen for the roof structure partly in order to reduce foundation loads.

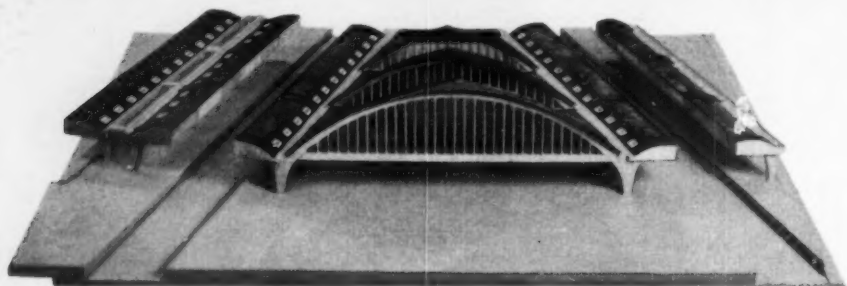
Shells are cantilevered forward of the arch-line, partly in order to preserve structural balance and partly to accentuate the dramatic form of the roof. The inside of the shells will be

SITE PLAN



Right, one of the five platform canopies. Formed by cylindrical timber shells, they cantilever 12ft and span 34ft 10in, supported on glued laminated timber bents. The upper edge beam of the shell, which is covered with tongued-and-grooved boarding laid diagonally, forms the valance running along the outside edge. The rear edge beam and the guttering are in plywood. Small openings in the shell provide natural lighting. Below, conoid shells are made up of three layers of tongued-and-grooved boarding, nailed and glued. The shells are cantilevered forward, partly in order to preserve structural balance and partly to prevent glare. The roof is waterproofed and finished with the Evode system. The finish is a silver film—which not only adds to the appearance of the roof but also gives a considerable light reflection

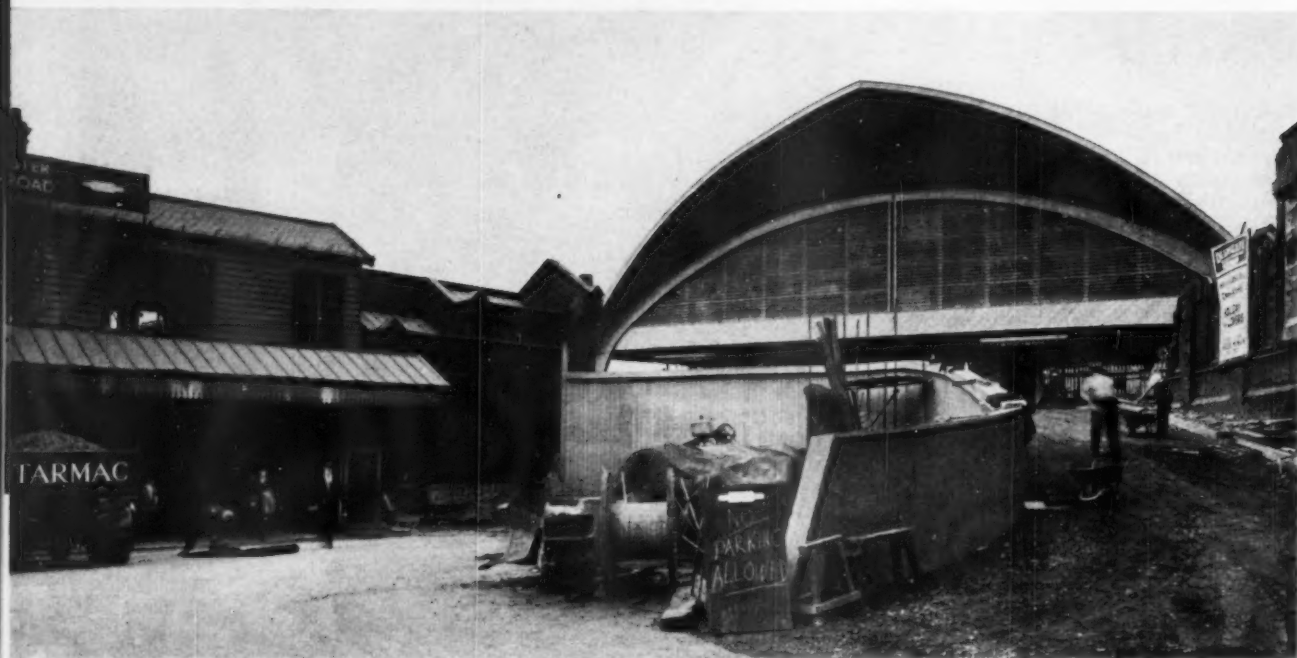




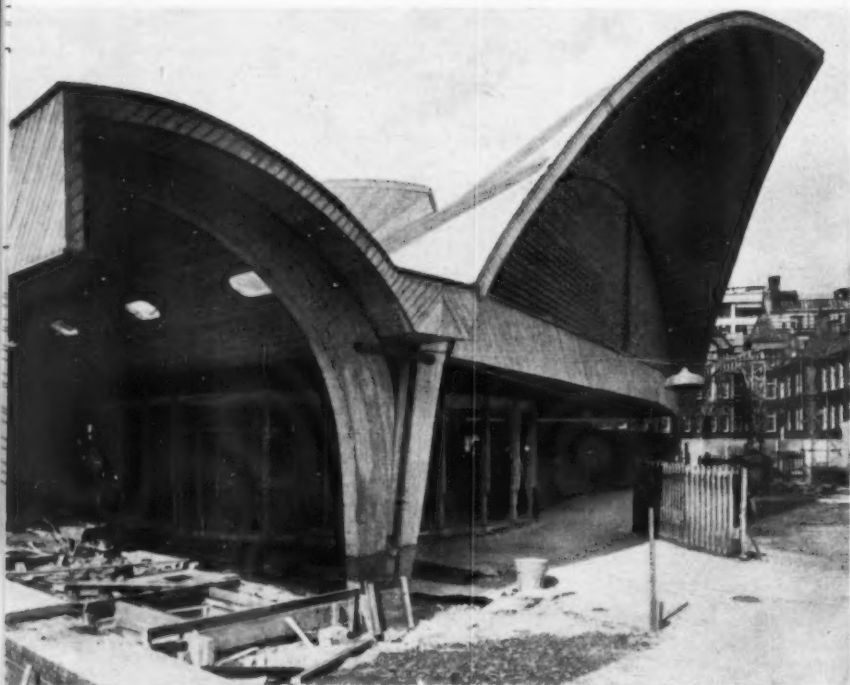
A model of the completed scheme

THE ARCHITECT and Building News,
4 November 1959

OXFORD ROAD MANCHESTER



Above, looking up the approach ramp to the sheltered concourse. When completed, the enclosing "arm" of a retaining wall will form a car park (see plan on page 404). Below left, the main entrance with concourse and booking office translucent taking shape. Below right, another angle on the conoid shell. Large panels of glass fibre under the apex of each shell and plastic domes over the platforms give ample natural light



Continued from page 404

sprayed with a P.V.A. glaze and the exterior surfaces will be weather-proofed with patent glass-fibre reinforced roofing compound.

Five platform canopies are composed of cylindrical timber shells cantilevering 12ft and spanning approximately 35ft supported on laminated frames. These shells were prefabricated in the joinery shops in order to achieve rapid site erection involving the minimum obstruction on the platforms. The upper edge beam of the shell forms a valance to the platform side.

Canopy shells are also made up of three layers of glued and nailed boarding. The upper edge beam is covered with diagonal tongued-and-grooved boarding, and the rear edge beam and gutter are formed in plywood. A series of small openings along the back of the shells will be glazed with transparent plastic domes to provide good natural lighting when a train is standing at the platform.

The timber used for the roof structure and for the free-standing booking office block within the concourse is Western Hemlock.

General Contractors, roof and awnings:

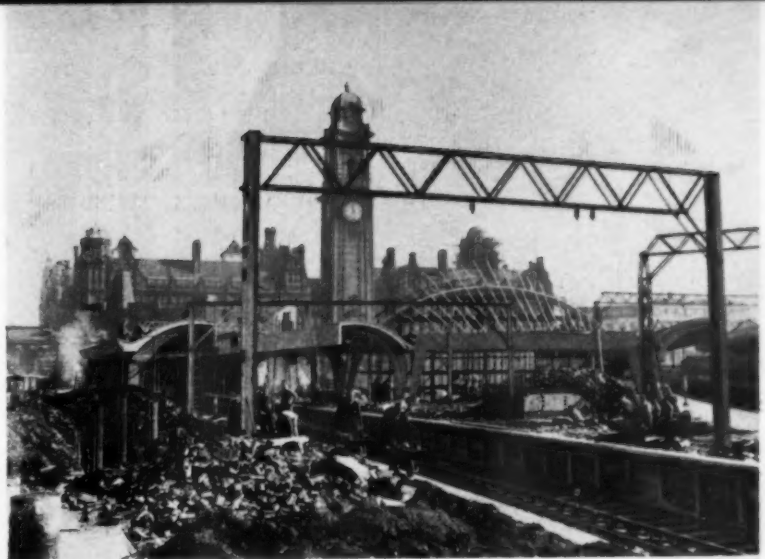
TINKER and YOUNG, LTD.

General Contractors, buildings:

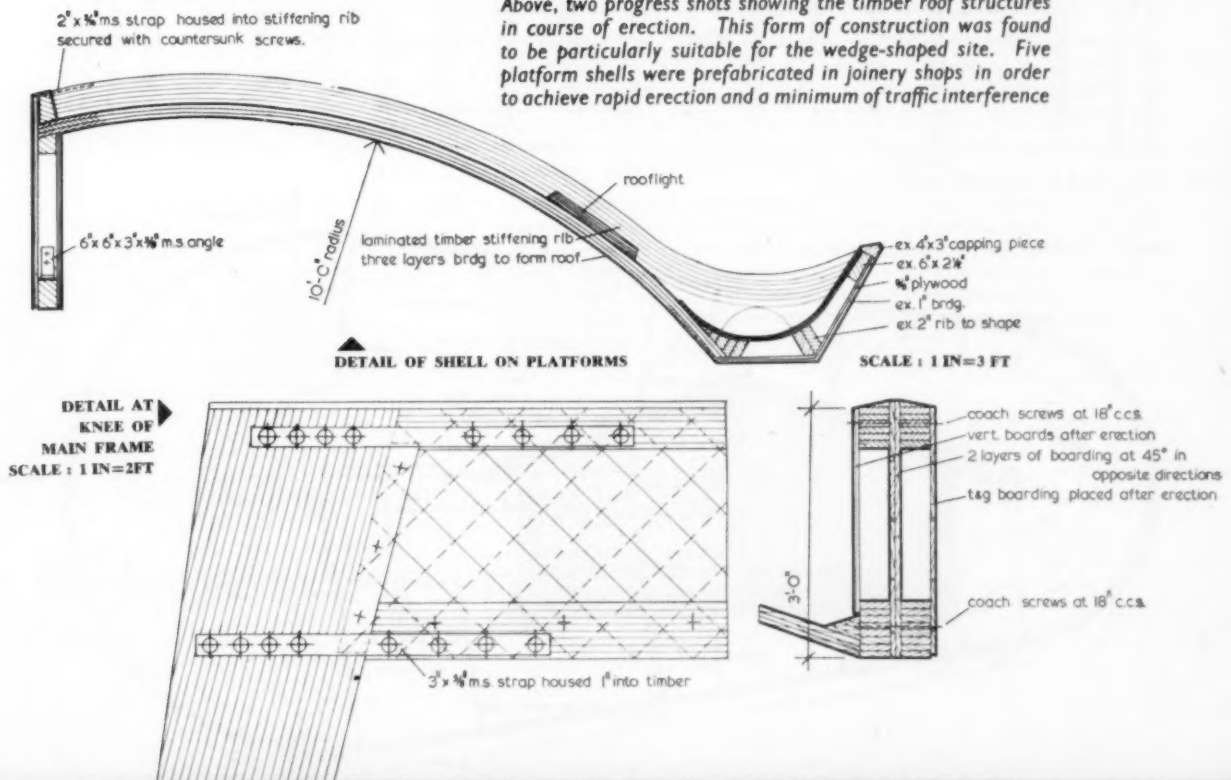
E. B. JONES & RAWLINSON LTD.

Sub-contractors & suppliers:

Enamelled Infilling Panels: The Rustless Iron Co. Ltd.
Domelights: Allan Blunn Ltd. Contractor for Roof and Awnings: Tinker & Young Ltd. Illuminated Sign: Signcraft Ltd. Ironmongery: A. G. Roberts Ltd. Metal Shutters: Potter Rax Ltd. Roof Waterproofing: Evode Ltd. Sanitary Fittings: S. Gratrix Ltd. Adamsex Ltd. Terrazzo Paving, Wall and Floor Tiles: Conways Ltd. Tile Flooring: Semtex Ltd.



Above, two progress shots showing the timber roof structures in course of erection. This form of construction was found to be particularly suitable for the wedge-shaped site. Five platform shells were prefabricated in joinery shops in order to achieve rapid erection and a minimum of traffic interference



SCALE : 1/16 F.S.

evode finish
36mm glinex
7/4 rafters

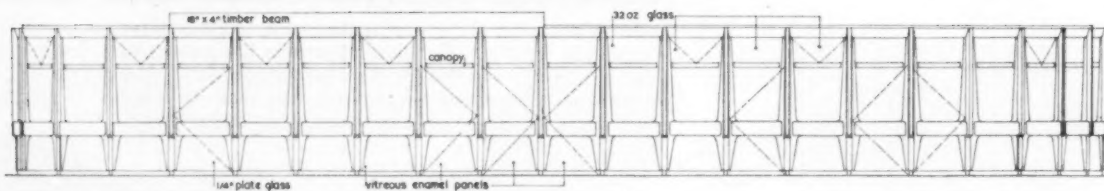
3/2" slotac acoustic sheets
1" timber fascia
3/2 oz. glass

**SECTION THROUGH
WALL OF
BOOKING OFFICE
BLOCK**

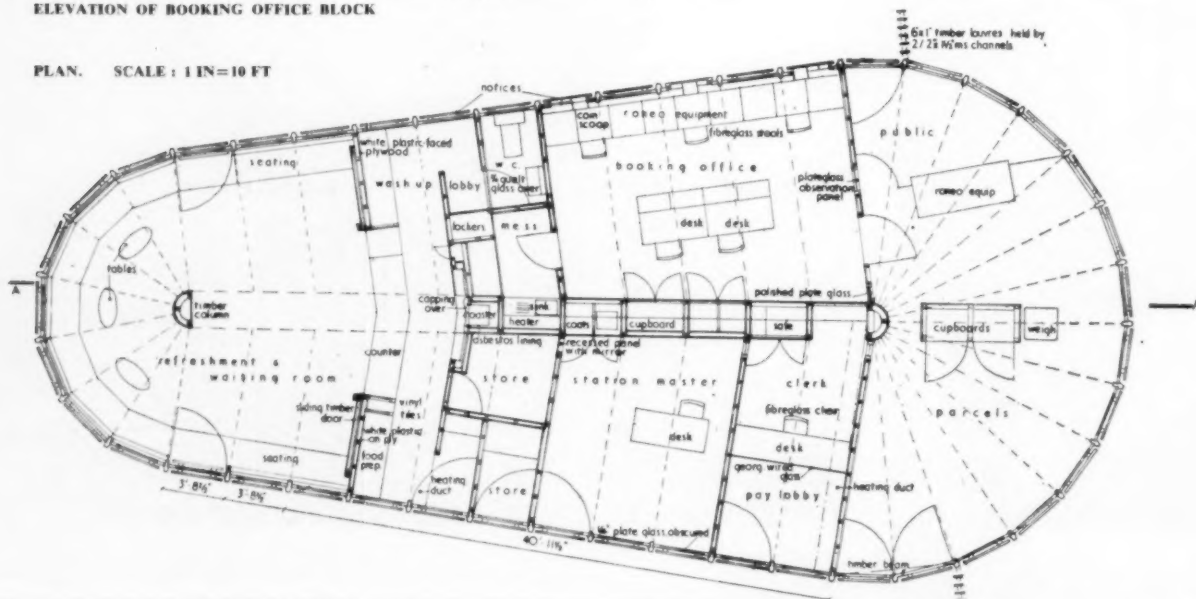
SCALE: 1/16 F.S.

3/2" plate glass
2" duniploia covered with leather on 1/2" timber
1" panel vitreous enamel finish to outside face and plastic on inside
3" duniploia seat covered with leather
1/2" plywood
1" timber with 3/8" holes
canterlevered seat support rebated into mullions
1/2" terrazzo finish
1/2" screed
6" concrete
hardcore

The interior is not complete, yet the continuity of expression in timber is to be seen in the booking office block, part of which is shown above. Detail, below and right



ELEVATION OF BOOKING OFFICE BLOCK



PLAN. SCALE: 1 IN=10 FT



SIGHTHILL HEALTH CENTRE — designed by the Department of Health for Scotland.

Electric floor warming at the Sighthill Health Centre

Fully controlled warmth

Sighthill was designed as an Experimental Centre under the National Health Service Act. The building forms a hollow square round a central courtyard. The north wing holds administrative departments on the ground floor and dental theatres on the first floor. The south wing houses the joint services departments. The east wing comprises child welfare services and the west wing is divided into six medical suites.

The building is heated by electric low temperature underfloor radiant heating. This is thermostatically controlled and designed to maintain against an outside temperature of 25°F. the following inside temperatures: surgeries, recovery and X-ray rooms 70°F.; passages and lavatories 60°F.; kitchen 52°F.; other rooms 65°F. Electrical intake is "off peak" and available between 7 p.m. and 7 a.m., and 11 a.m. and 3 p.m.

Loadings

Total loading amounts to 262 kW and is designed for off-peak operation. This load comprises 232 kW embedded in the concrete floors and 30 kW in concealed wall panels. The total floor area of the building is 35,000 sq. ft.

A variety of floor finishes tested

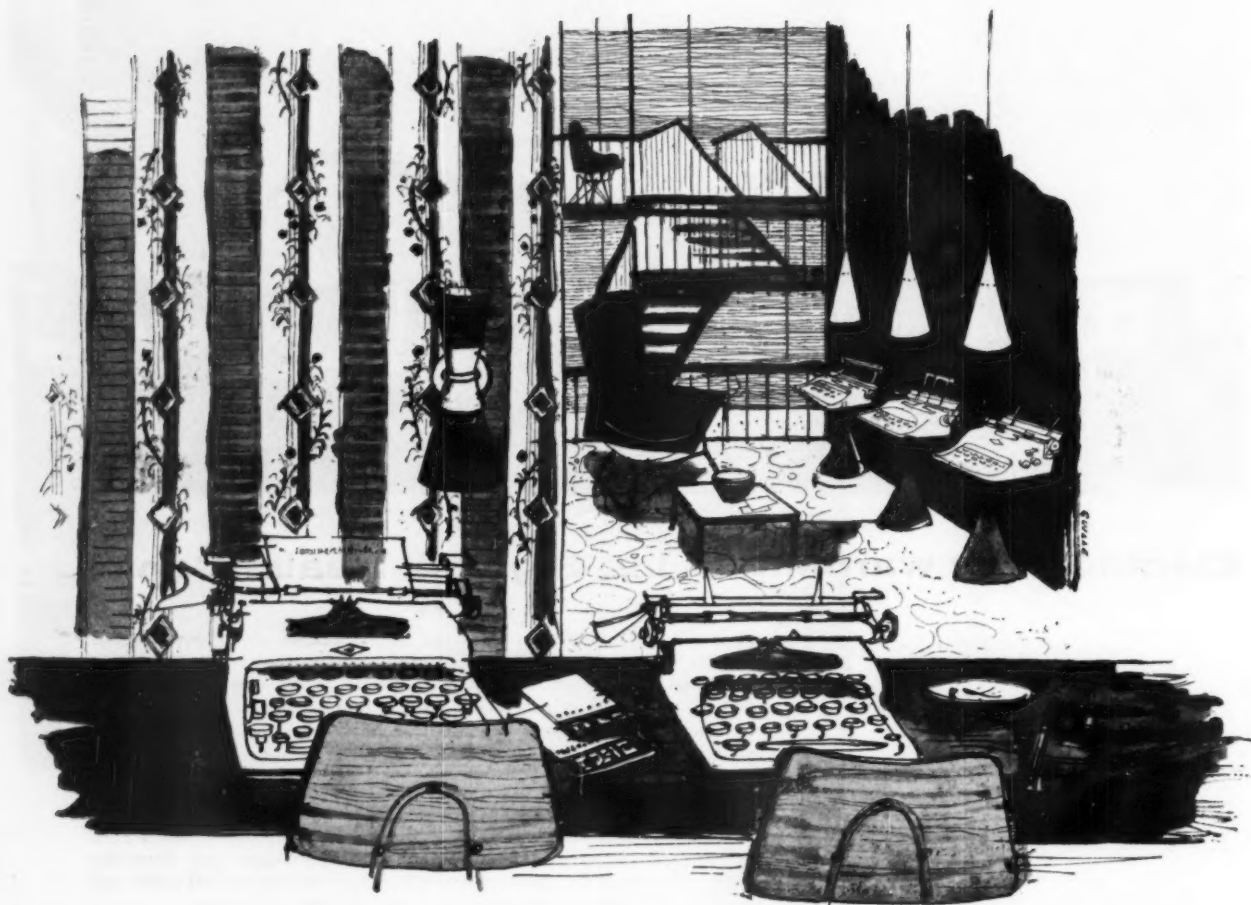
Floor finishes laid were: wood block, cork tile, thermoplastic, mastic asphalt, Caithness stone slabs and terrazzo. All these have given very satisfactory service under heated floor conditions.

Results

The installation has been running for over five years and the average annual consumption for floor warming purposes is 418,960 units costing £1,400.

Thermograph records were taken during the winter 1955/56. These show that when, in February 1956, the mean daily outside temperature was 22.6°F., the maximum drop in inside temperature during the cut-off period was only 2.6°F. Even under these extreme conditions the internal air temperature did not fall below 60°F.





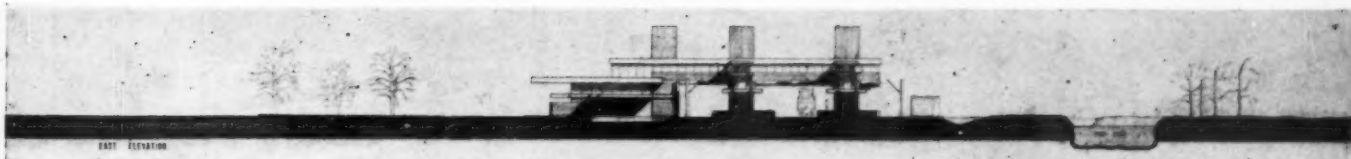
WPM MORTIMER STREET

The Architects' Department formerly at 125, High Holborn, W.C.1, has been reopened in the Company's new London premises at 19/21, Mortimer Street, W.1. You are invited to visit our spacious showroom on the 1st Floor and to make use of the improved facilities of our special advisory service. Our artist Pamela Guille depicts wallpaper C.815 as used in a typewriter showroom.

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EAST ELEVATION

EAST ELEVATION

PROJECT FOR HARLOW TOWN

AS part of the railway electrification from Bishop's Stortford to Liverpool Street, and to serve the increasing number of passengers from Harlow New Town, a handsome new building is now under construction to replace the old Burnt Mill Station.

Planning

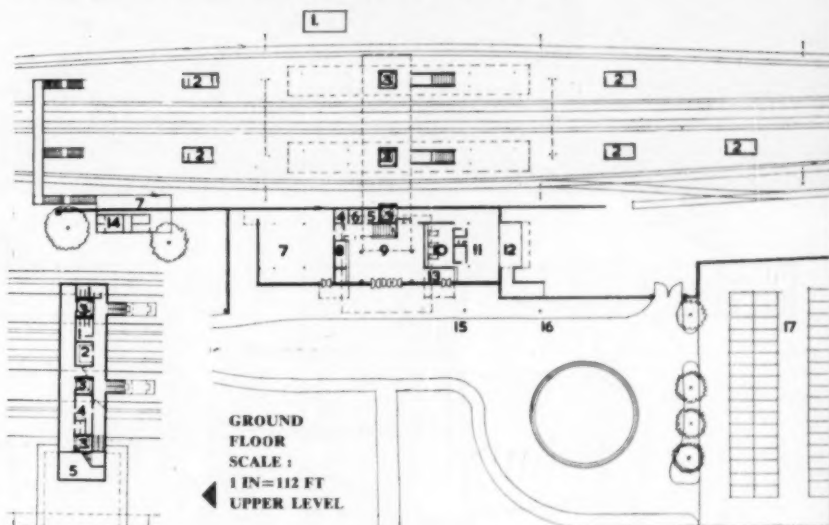
The new station will be approached by an access road and forecourt which will shortly be built by the Harlow Development Corporation, where it is hoped to provide parking for 120 cars. There will be two island platforms connected by a covered overbridge, containing public waiting rooms and lavatories, to a 50ft by 40ft by 17ft high glass-walled concourse on the south side of the tracks, giving on to the station forecourt. The concourse will contain a booking office with three ticket windows, with an automatic ticket-issuing machine, public telephones and stationer's and tobacconist's kiosks. It will be flanked on the west side by a storage space for 150 cycles, and on the east side by an inquiry office and parcels office, with a large parcels yard beyond.

The station is planned so that parcels and baggage are separated from passenger circulation. Three goods lifts serve the overbridge and will be available if necessary for those who are unable to climb the stairs. Lift towers are a dominant feature of the building. Platforms will be 800ft long and will have enclosed waiting shelters for the public and planting boxes.

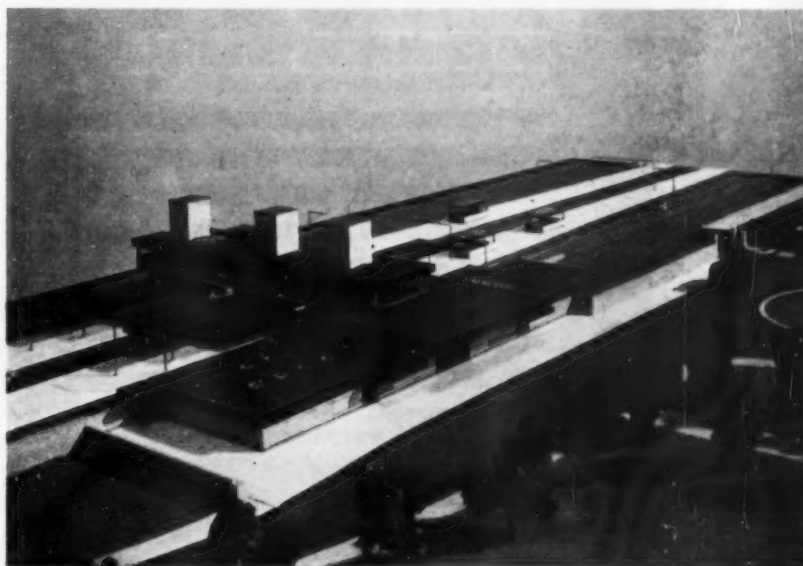
Construction and Materials

Despite the increased size of the new station, it has been designed to be operated by one man during off-peak hours. Materials have been chosen for hard wear and minimum maintenance. The public areas will have tiled floors, glass mosaic dadoes and varnished timber ceilings. External walls will be of grey flint-lime brick and there will be large areas of glass. The architects have aimed at expressing the beauty of continuous surfaces of natural materials, and paintwork has been reduced to a minimum. Prestressed concrete construction will be used in the concourse and overbridge.

SOUTH ELEVATION



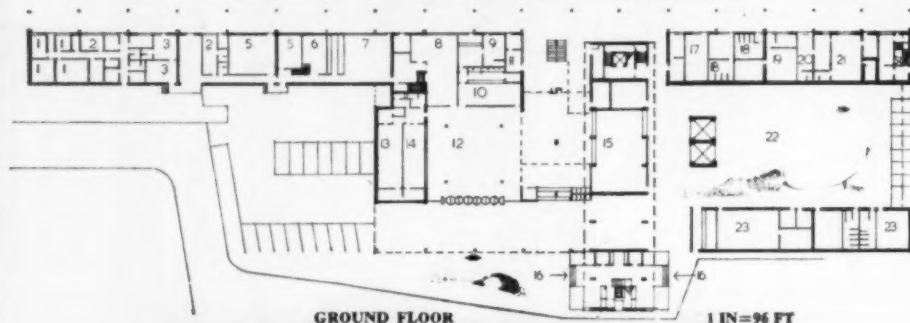
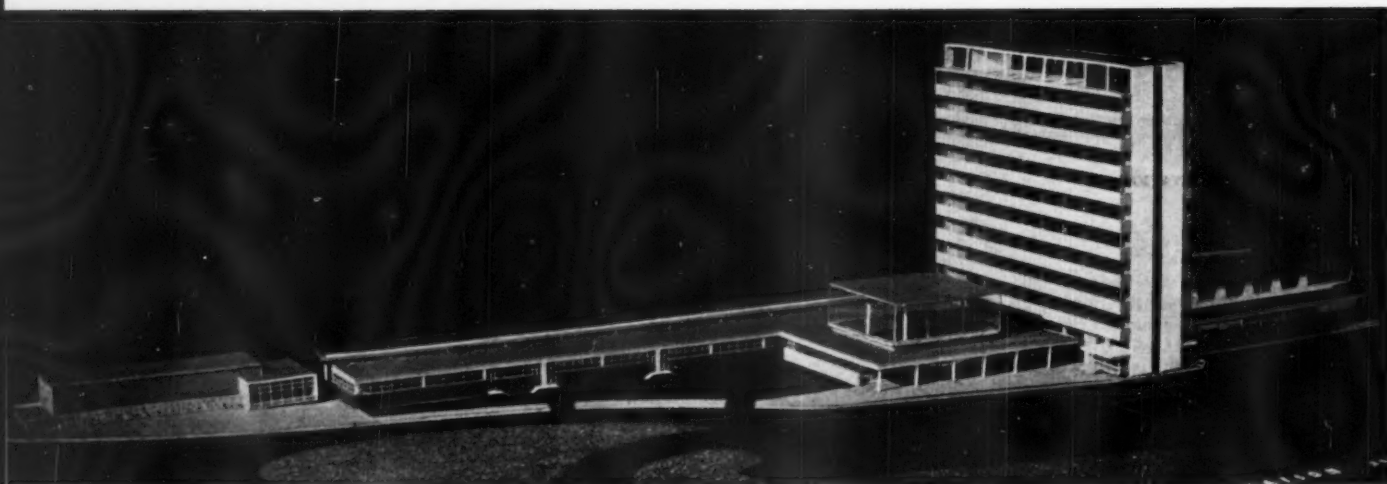
GROUND FLOOR KEY: 1. Relay room. 2. Shelter. 3. Lifts. 4. Stationmaster. 5. Boiler room. 6. Loudspeakers. 7. Cycles. 8. Kiosk. 9. Concourse. 10. Tickets. 11. Parcels. 12. Loading. 13. Enquiries. 14. Temp. station. 15. Taxis. 16. Buses. 17. Car park. UPPER FLOOR: 1. Toilets. 2. Waiting room. 3. Lifts. 4. Staff. 5. Void.



Above, a model of the proposed station. There will be a high level of fluorescent lighting, designed to enhance the appearance of the building by day and night



SOUTH ELEVATION



KEY: 1. Offices. 2. Staff room. 3. First aid rooms. 5. Store. 6. Kitchens. 7. Cafeteria. 8. Bar and restaurant. 9. Stationmaster. 10. Information. 11. Ticket collector. 12. Concourse. 13. Accounts. 14. Booking. 15. Left luggage. 16. Office entrance. 17. Porters' room. 18. Toilets. 19. Guards' room. 20. Pay lobby. 21. Cash office. 22. Parcels hall. 23. Parcels offices.

PROJECT FOR PLYMOUTH

THIS project forms part of the British Railways, Western Region, modernisation plan.

North Road Station (now known as Plymouth Station), which, in common with the city centre, suffered severe damage from bombing, is the principal passenger station serving Plymouth, dealing with two-and-half million passengers each year.

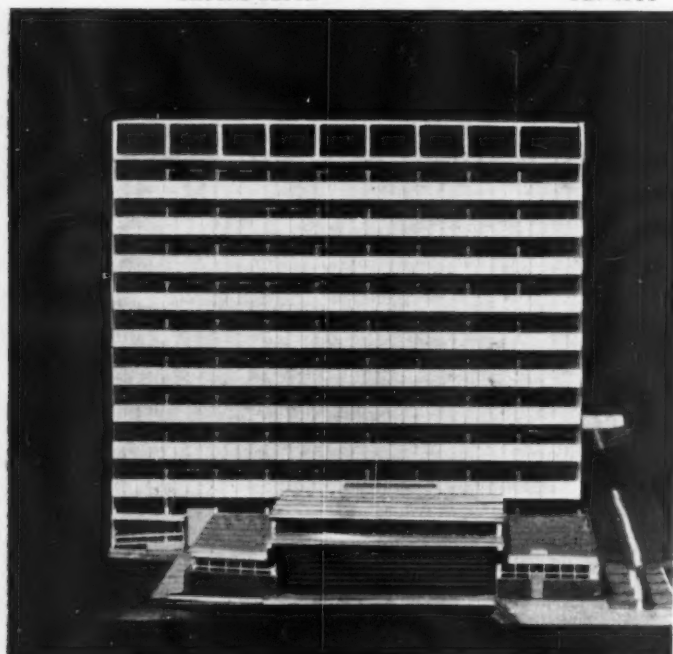
The project, which has been developed in consultation with the Plymouth Corporation, includes the complete replacement of the existing station buildings and parcels depot, with the addition of an office block of contemporary design, and a power signal box. Approach roads are to be redesigned, permanent way layout and platforms remodelled and a scheme of improved signalling carried out.

Dominated by a nine-storey block, the new station building has been designed to incorporate all the usual facilities for passengers on the ground floor, with accommodation for district railway officers and their staffs on the higher floors.

The concourse is flanked by the ticket and enquiry offices, left luggage office, public telephone kiosks, etc.

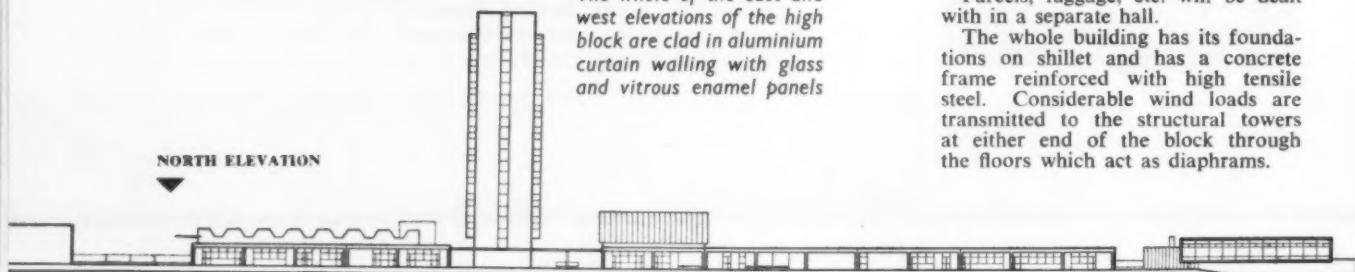
Parcels, luggage, etc. will be dealt with in a separate hall.

The whole building has its foundations on shillet and has a concrete frame reinforced with high tensile steel. Considerable wind loads are transmitted to the structural towers at either end of the block through the floors which act as diaphragms.



The whole of the east and west elevations of the high block are clad in aluminium curtain walling with glass and vitreous enamel panels

NORTH ELEVATION



Why a NEW era for Wood?



BECAUSE research plus new design and production techniques make wood an entirely new constructional material—a material that is exciting to the designer, economical in first cost and very low in maintenance costs.



An example of Timber Curtain Walling at Jacobs Wells Flats, Bristol, designed by A. H. Clarke, A.R.I.B.A., A.M.T.P.I., City Architect, Bristol.

Timber Curtain Walling offers — contrast in colour and texture by the use of different woods, possibilities for special detailing to suit the character of the building, ease of fabrication and erection, a light-weight infilling material in timber and plywood, good thermal insulation, low cost walling.

You should know more about today's wood:

properties and design data on timbers and plywoods; the use of plywood girders and box beams; glued laminated beams, portals and arches; framed girders and roof trusses; trussed purlins; shell roofs; bridges; farm buildings; flooring; cladding; curtain walling; thermal insulation; finishes; preservation; fire endurance; mechanical and electronic testing.

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TDA TD156A

DOUBLE SECURITY

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YALE NO. ONE Double Cylinder automatic deadlatch



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2 The latch bolt has a normal $\frac{1}{8}$ ” throw. When the door is closed it is thrown forward automatically another $\frac{3}{16}$ ” and is *deadlocked* against end pressure, and for further security the lock is fitted with Yale’s special anti-pick mushroom drivers.

This ingenious and practical cylinder rim deadlatch is one of the huge range made by Yale. A range which includes cylinder and lever, rim and mortice locks of all kinds . . . for all types of security risks. Please order through your usual Merchant or Ironmonger.

Literature: explanatory leaflets and detailed specifications will gladly be sent on request.

SPECIFICATION

Case & Staple Zinc Alloy Pressure Cast. Concealed fixing. Standard Enamelled Nickel Bronze finish. $3\frac{1}{8}$ x $2\frac{1}{2}$ x $1\frac{1}{4}$ in. Alternative finishes :— Chromium-plated all over. Cream, B.M.A. Finish all over.

Striking Plate With reverse bevel bolt for doors opening outwards.

Springbolt Brass, polished. Reversible.

Auxiliary Bolt Brass, polished.

Lever Handle Zinc Alloy Pressure Cast. Regularly

supplied. Brass plated. Independently spring loaded. Three pin tumblers.

Hold Back Plunger Brass, polished. Press-button action.

Cylinder Brass, polished (List No. 1109). Five pin tumblers.

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Architecture illustrated on the previous pages is designed to serve the purpose of a railway system . . . to transport passengers and goods throughout a network of railroad and shipping routes. As a conclusion we illustrate recent design in rolling-stock and shipping, which fulfil the purpose of movement.

1. 2,000-h.p. Swindon Diesel Hydraulic locomotive. Built for Western Region of British Railways. Consultant designer: Design Research Unit (Misha Black).

2. East Kent Open Saloon. New electric stock for Kent Coast. Interior design for the Southern Region by Trevor Dannatt.

3. & 4. The S.S. Maid of Kent car ferry on the Dover-Boulogne service. Built by William Denny & Bros. Ltd. of Dumbarton. Decorative and furnishing work of the public rooms, staircases, passenger cabins, etc., was carried out by the builders to designs prepared by the owners' consulting architects, Ward and Austin,

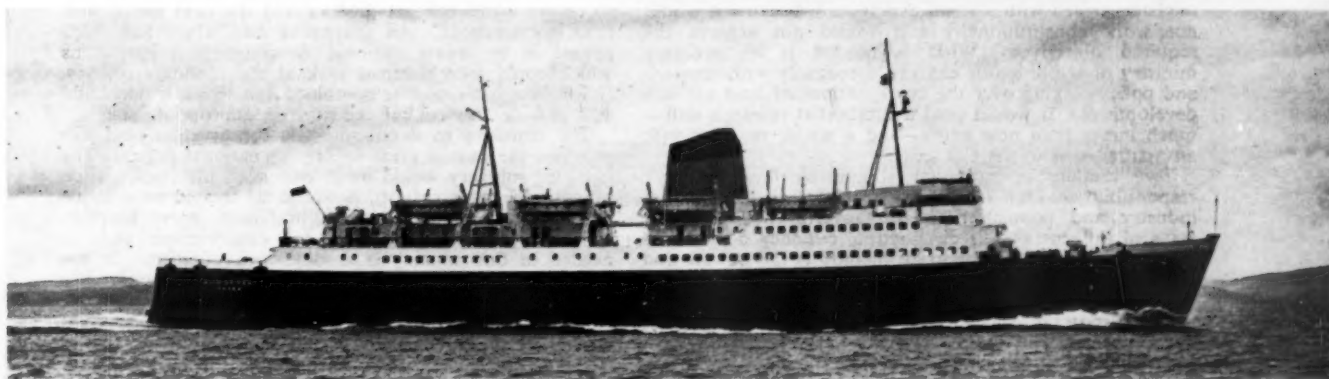


1



2

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BRITISH RAILWAYS ROLLING STOCK AND SHIPPING DESIGN

TOWN AND COUNTRY PLANNING ASSOCIATION

LOCAL GOVERNMENT ORGANIZATION AND PLANNING

Address at the third session of the Town and Country Planning Association's jubilee conference by PETER SELF, B.A., Lecturer in Public Administration, London School of Economics

I DO not mean to suggest that the deficiencies of planning organization are to be found mainly or exclusively in the sphere of local government. These weaknesses stem from the top of the ladder, and—to speak frankly—the weakest point of all is in central administration.

Some people treat all major planning questions as if they were a matter for the Central Government. I do not mean to endorse this viewpoint. On the contrary, I think it is essential for national planning to stick to those matters which genuinely and necessarily are of national concern, and personally I would like to restrict the field as closely as is feasible. Vitality in planning still springs from the roots upwards. It originates in civic and local pride, in the drive to remedy what is bad and to protect what is good in the local environment. It is essential that our system should retain and strengthen these local roots.

At present, various Central Government departments intervene in a great variety of ways in the work of local planning authorities. There is too much intervention, not too little, the drawback being that while the central departments pursue their various courses, often along contradictory lines, the real possibilities of national planning go by default. It is twenty years since the Barlow Report stressed the need for an effective central planning authority. For a while, we had a Ministry of Town and Country Planning, but it was never allowed to come to grips with the basic problems. Now planning forms the most important part of the work done by a joint ministry, although the fact is not indicated by its title.

However, it matters little what the central planning authority is called. The important thing is its status and functions. I have never believed in the idea of a super-minister, armed with a small expert staff, because it would not work constitutionally and would not achieve the required objectives. What is needed is an ordinary ministry of senior status charged specifically with research and policy-making over the key questions of land use and development. It would need a substantial research staff—much larger than now exists—and a senior minister with an assured seat in the Cabinet.

Two matters in particular should be this ministry's responsibility. One is the inter-regional distribution of industry and population. The Government has many ways of influencing this distribution, but they do not add up to a policy. One important method is the powers and inducements for influencing industrial location possessed by the Board of Trade, which is increasingly using them to try to mop up local pockets of unemployment wherever they appear. This seems to me a very short-range and over-localized approach from a Government department. I think it is wholly right to persuade more industry to go to Scotland or the north-east coast instead of Greater London. But within each region local planning considerations should play a much bigger part. The best destinations are not Central Clydeside or Central Tyneside just because those places have currently the largest numbers of unemployed. Surely the better and sounder course is to seek to develop the general industrial economies of Scotland and the north-east coast, and this means seeking out sites where industry has elbow room to expand and a good environment can be created for the workers. A narrow interpretation of "work to the workers" seems more likely to thwart than to assist. The General Election revealed a distressing preoccupation with snap cures for local unemployment; nobody saw the connection with getting rid of obsolete factories and congested housing.

The Ministry of Transport also influences the distribution of industry and population very greatly through its highway planning. So does the British Transport Commission through its plans for railway modernization and closure of lines. I am inclined to think that these bodies consider technical factors, but ignore broader economic and social policies. Naturally communications must focus on London. But need they emphasize the capital's dominance? Would it not be wiser to give rather more weight to improving the communications of other industrial regions? Highway and railway planning seem to proceed in a sort of sealed technical container—and even the technical quality of the package is very open to question.

The truth is that the lessons of the Barlow Report are getting lost and no one is even considering whether the analysis still applies. The concentration of 40 per cent of the national employment increase within about 40 miles of London is surely evidence of this fact. The first task of the planning ministry should be to bring the Barlow Report up to date on the basis of thorough research, and then to ensure that policies over industrial location, highways, etc., follow a general strategy. I do not see that this need mean any undue accretion of powers in the hands of one ministry. It would entail controlling industrial location through planning controls instead of through the additional powers held by the Board of Trade, which would become redundant. It would also be necessary to transfer the Board's powers to aid industrial development to the planning ministry. Such aid would continue partly in the form of grants to local authorities, partly in the shape of development projects for attracting industries. Local authorities could do more of this work and so (if we could but get them) could the next lot of new town corporations. An alternative idea which has much appeal is to create regional development corporations which could take a broad look at the economy of, say, Lancashire and Cheshire combined and which would build and provide services for industry on appropriate sites.

The corollary to development is conservation, and this provides the second great sphere for national policy. The planning ministry would be in charge of the conservation of national resources which would be treated as a single field covering minerals, agricultural land, water supplies, etc. How much regulation for conservation ends is needed in this country is a very open question. It has never been properly looked at at the official level. We have, for example, no proper economic and demographic analysis which could serve as a basis for deciding what protection should be given to agricultural land. This is ironical, when one considers the innumerable local tussles and fights which have taken place since the war over this subject.

I have dwelt on these questions of national policy, even though this is a paper about local government, simply because if we could overcome them it would be far easier to get on with the tasks of planning at the regional and local levels.

Regional Planning

The next step down from the national level is the regional one. Here no effective organization of any kind at present exists. Yet the existence of planning problems is undeniable.

The large conurbations, which contain forty per cent of the population, dominate several of the regions of Britain. The area within thirty to fifty or more miles

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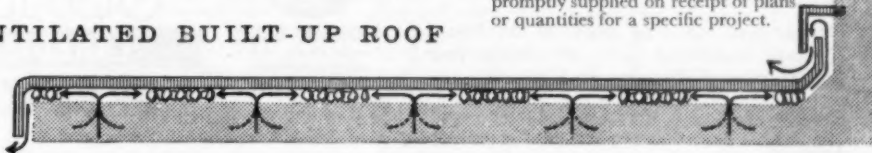
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LOCAL GOVERNMENT ORGANIZATION AND PLANNING

from the centres of these conurbations has become the scene of intensive conflicts over land use and of rapid movements of population and industry. The protection of green belts and of countryside within these city-regions (as the Americans call them) has become an intensely difficult objective which has to be carefully balanced against the enormous pressure of demand for houses, factory sites and recreation facilities. Another urgent need in these city-regions is to plan new highways for carrying the mounting traffic from the main city to subsidiary towns and coastal resorts. Other problems concern the treatment of declining coalfields and the clearance of derelict land. All these are essentially regional questions.

The Local Government Commission is paying special attention to the large conurbations, while a Royal Commission is performing the same service for Greater London. The structure of government in these great urban areas could certainly be greatly improved, but I am not altogether happy about the idea of establishing a top-tier authority or urban county for an entire conurbation. A Greater Manchester or a Greater London Authority, supposing such were to be created, would be an enormous urban giant, whose boundaries would nevertheless stop at the point where urban growth has already ended. This might intensify the kinds of conflict between county boroughs and counties with which we are already familiar. One of the great needs of local government is to transcend the city-county division and cater better for the great intra-regional questions of population movement and urban spread. This is much too often viewed as a problem of public housing overspill, which is much too narrow an approach. I return to regional organization at the end of this paper.

Large Cities

This brings me to the position which large cities will occupy in future in local government and planning. If we stick to the policy of limiting their growth and of reserving green belts, as I hope we shall, then certain other things must be done. To start with, the green belt itself and other measures of rural protection ought to be based on a first-rate regional plan. It is important that the city's co-operation in working such a plan should be secured and that the green belt should not look like an attempt by surrounding authorities to prevent city boundary extensions. It will be exceedingly hard during the next decade to maintain satisfactory green belts. But if this can be weathered, they will become accepted as suitable permanent limits to the cities' boundaries.

This situation will leave the city with a population which will decline for a period as redevelopment of its inner areas proceeds and which may then remain static. I do not think this matters, so long as really effective methods are used to accommodate the city's surplus population and employment in other places. It is, however, wholly unfair and unreasonable that this job should be left to the cities themselves. The big cities cannot introduce town development schemes on their own, but have to win the support of other local authorities. Moreover, most town development schemes are small and rather slow. The Town Development Act is an excellent device for helping small towns to expand—and as such deserves every success—but it will not cope with the overspill problem of the big cities. And by overspill I mean not just those who depend on public housing (large and important as that group is) but all those seeking or needing houses outside the city boundaries. Consider the scale of this total pressure—a migration of over 400,000 (allowing for natural increase) out of Greater London in only seven years, and that at a time when public housing both in and out of London was heavily frustrated and reduced by lack of sites.

I have come to the definite view that the designation of more new towns is the only possible way of grappling with

these problems. New towns, unlike most town development schemes, can act as really effective counter-magnets to the pull of the big cities. The Government has recognized this point to the extent of agreeing that some large cities might build new towns of their own. But this seems to me a wholly mistaken idea. The big city is being cast in a double role, it is being asked to shed population and employment and also to leap twenty or more miles cross-country in order to act as an effective development agency at the receiving end. It is expected to be both a repellent and a magnet. This is unfair to the big city, which is bound to have some regrets about losing some of its citizens and which has other urgent and necessary tasks to attend to within its boundaries; and it is also unfair to the new town, which needs to grow up as an entity in its own right and not as a distant colony, even though the colonial power is a benevolent one which promises eventual independence. Moreover, the big city often has to explore for its new town site in somewhat hostile territory. Since even the search can easily prove fruitless, small wonder that some cities seem to be drawing in their horns and reverting to older ideas of boundary extensions.

If regional bodies did exist the creation of new towns would plainly form one of their responsibilities. But since they do not, the creation of more new towns is plainly a responsibility of the Central Government. I suggest that six more new towns should be started at once to meet the urgent needs of London, Birmingham and Manchester. The sites should be at least forty miles distant from London and twenty miles distant from Birmingham and Manchester. At least one promising site might be found somewhere between London and Birmingham in the vicinity of the new motorway.

This is no more than a minimum programme for immediate action. Eventually, considerably more projects will be needed, while other cities also have strong claims. One project which seems to have everything to recommend it is the development of a new town somewhere east of Sheffield. A new town at Gainsborough for example would be well placed for rail, road and air transport and might act as a shop window for Sheffield itself, whose possibilities of expansion are cramped by its size and its location under the Pennines. There is an obvious danger that Government attention will be confined to the largest and most politically powerful cities. After all, only London and Glasgow have had the help of new towns and even Manchester has been waiting fifteen years in the wings. It would be the mark of a socially and locally sensitive Government to act on the needs of such cities as Sheffield.

This point has to be stressed again and again because the consequences of curbing the growth of the big cities are simply not appreciated. The pressure generated by these cities for new land for housing and other forms of development remains enormous. Not only is the natural increase of the population proving greater than expected but the demand for living space per person is growing rapidly as the standard of living rises. This is all in addition to the large numbers displaced by the cities' own redevelopment schemes, and unless satisfactory provision can be made for the growing numbers displaced on this account, redevelopment itself will be held up and impeded.

Redevelopment

Redevelopment is the most important task facing our cities over the next twenty years. In most cities this job has only just started to be tackled and the scale of the work to be done is immense. Any hope that the blighted and semi-blighted areas which encircle the hearts of the largest cities will regenerate themselves by natural means has been dispelled. The task has become primarily one for the local authorities. This involves giant highway developments, the re-housing by stages of several million people, the replacement of obsolete social equipment by schools and communal facilities, the provision of new parks and playgrounds, the clearance of thousands of obsolete industries with provision for their relocation in better surroundings. Such action requires not only new

LOCAL GOVERNMENT ORGANIZATION AND PLANNING

techniques but the adoption of new ideas. For example, hundreds of small firms fear that they will "go under" as a consequence of redevelopment through not being able to afford the cost of new premises. Such experience as has been gained to date suggests that a move to modern premises where better layout can be used and new machinery installed produces a considerable increase in productivity once the initial difficulties have been overcome. But the initial difficulties themselves are undeniably very great, so that an onus falls on the local authority to give every help with the provision of new sites and new factory accommodation. Possibly we need to accept the idea that relocation of obsolete factories, like the rehousing of slum dwellers, justifies some degree of temporary subsidization.

Internal Organization

I now come to what is perhaps the most delicate part of this paper. The fact that town planning has developed from a concern with architectural and engineering questions to having an equal concern with social and economic ones is now widely accepted. In fact, some people believe that town and country planning is now primarily an economic and social function. I do not subscribe to this view, since I believe that visual design and the engineering aspects of planning remain of the greatest importance; but it is now clearly impossible to plan wisely on this basis alone.

Our planning organization, both central and local, is plainly not adapted to its new requirements. The enormous expenditure involved by big redevelopment schemes or new highways is often based upon inadequate economic and social analysis. Part of the trouble is that our knowledge of the economic functioning of cities is all too slight and professional and academic economists have been regrettably reluctant to enter this field despite its enormous practical importance.

Conclusions

(a) Central Government

We badly need a central planning ministry which really functions as such. The present Ministry of Housing and Local Government vets and advises on local plans, but it does not formulate broad policies for the use, development and conservation of land. Because of this fact and because other Government departments impose their own narrow and unco-ordinated requirements, much of the potentialities of local planning administration run to waste. The planning ministry would lay down general economic and social policies to be followed which would provide a framework for local planning. It ought not to intervene (and nor ought other Government departments) with the actual decisions of local planning authorities except in very rare cases.

(b) Local Government Organization

Ideally the best structure for planning (and probably for local government generally) would be:

(i) Elected regional bodies—probably about 15 for England and Wales. These would make regional plans and would be responsible for main highways; new towns and town development schemes; industrial location within the region; the conservation of agriculture, minerals and natural resources within the region; green belts, etc. Industrial and town development would be carried out either by the smaller local authorities, acting under the control of the regional body, or by regional development corporations.

(ii) Large cities (i.e., about 200,000 population upward) would retain a high degree of autonomy. They would be represented (directly or indirectly) upon the regional body and would comply with the regional plan. But the regional plan would not interfere to any appreciable extent with the internal planning of those cities. The city

would be free to make its own decisions about the scope, timing and character of redevelopment, but it would be freed of any worry over the "overspill" problem. This might reconcile it to a freezing of its administrative boundaries.

(iii) Medium-sized towns (i.e., about 60,000-200,000) would also have a high degree of autonomy. In their case the regional authority might supply certain large-scale services and also technical aid. But these should in the main be supplementary or voluntary forms of provision rather than transfers of local services. The growth of these towns would have to be co-ordinated with the regional plan.

(iv) Local districts. These would be mixed urban and rural ones with populations of 20,000 upwards. Necessarily these districts would be less autonomous. Planning power would be delegated to them by the regional body but they would have to comply with the provisions of the regional plan. Unlike large and medium-sized cities they would not possess planning powers in their own right though they would possess a right to delegation.

This structure has many advantages. It seems to me to apply planning at the crucial levels—regional, city, local—without creating too cumbersome a structure. The system would be a two-tier one like the present one in the counties but because the onus would be more rational I think it would work better. There would be less need both for central control and for city-rural rivalries. The regional body would be a comprehensive, synthesising agency without however using a heavy hand in its dealing with the cities. Moreover, both the regional bodies and the large cities would possess the *technical* requisites for good planning, i.e., adequate finance and the ability to employ proper planning teams.

Failing this solution, one must try to get as many of its advantages as possible out of a reform of the present system. Suitable steps would be:

(a) Amalgamation of the smaller counties. A county of 750,000 or 1,000,000 and over, if its boundaries are right, can take a broad view of planning and can afford the means to plan well. Smaller county councils often cannot and do not, and their planning is often far too influenced by rivalries and conflicts with the largest town in or adjoining their area. If this town is not already a county borough the county lives in terror that it will become one.

(b) No change in the status or, as a rule, the boundaries of the larger cities.

(c) A more uniform treatment for medium-sized towns, i.e., those with 60,000 to 150,000 or 200,000 population. These should all (whatever their present status) become "most-purpose" authorities, providing most of their own services but receiving some services and some technical aid from the county council.

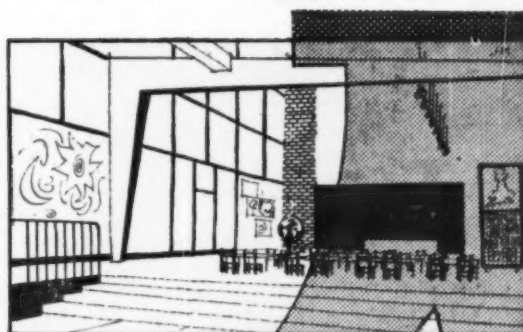
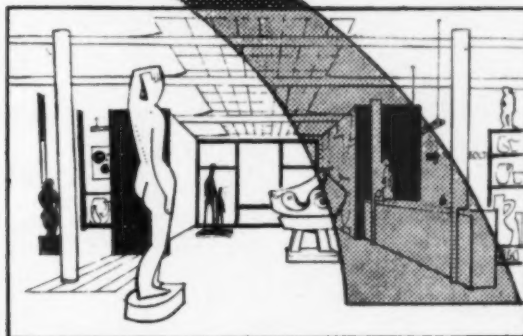
(d) In the big conurbations, I think the present county districts and the smaller county boroughs should be reorganized to form the kind of most-purpose authorities which I have described.

(e) In the special case of Greater London I favour a bolder approach. The area is so urbanized and integrated that larger units are more appropriate and I consider that six or seven large authorities would give the best results. These would follow the sector principle, which represents the traditional lines of outward growth and migration. For example, the metropolitan part of Kent would be combined with the south-east corner of the County of London. The result should be well-balanced, efficient units who could "take-over" some of the traditional county loyalties.

(f) Outside the conurbations, urban and rural districts would be combined to form new and stronger units which could be given greater powers.

(g) Finally but not least, the enlarged counties and the big cities would form regional planning committees. These committees would co-operate with the planning ministry in the preparation of outline regional plans. These plans would have only an advisory basis but, if adopted by the minister, they would form the basis for approvals of local development plans.

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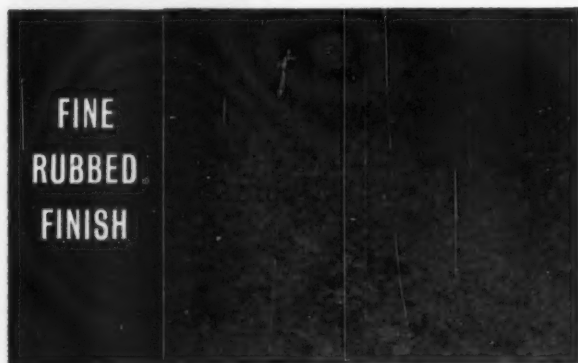
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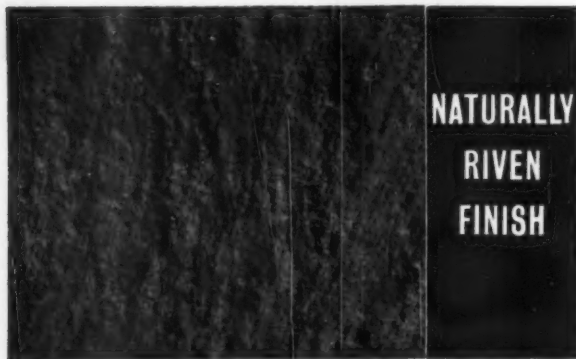
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Industrial Notes

● Marryat & Scott Ltd. have secured an export contract for eleven heavy duty goods lifts for the transit sheds in the Rangoon Port Development scheme. The lifts will be electrically operated and will be capable of handling up to 700ton/hour. The order was placed by the West German main contractors and Sir Alexander Gibb & Partners are the consulting engineers.

● Paramount Asphalte Ltd., manufacturers of Parovents thermal insulating screed ventilators, for use in asphalt or felt covered roofs, have licensed Apex Bitumen Industries Pty. Ltd., of Marrickville, Sydney, N.S.W., to be sole manufacturing and selling agents of this product in Australia.

● The head office of Precision Reinforced Fibres Ltd. has been transferred to the factory at Gosbrook Road, Caversham, Reading (telephone: Caversham 74224).

● Mr. R. L. Herring has retired from his position as managing director of Lamson Engineering Co. Ltd. and has been succeeded by Mr. D. C. H. McLean. Mr. Herring will continue to serve as a director of the company.

● Mr. Kenneth Druce, D.F.H., A.M.I.E.E., has been appointed sales manager to The English Electric Co. of South Africa (Pty) Ltd. Mr. W. M. Todd will succeed Mr. Druce as manager of the company's Bristol office.

The recently completed booking hall at the new Notting Hill Gate station (Central and Circle Lines), showing the subway from the street-level entrances. Telephone kiosks may be seen at left, bookstall at right and ticket machines and barrier in the middle-distance with top flight of escalators beyond



● The Belfast area office of the A.E.I. Lamp & Lighting Co. Ltd. has moved to 18 Adelaide Street, Belfast (telephone: Belfast 29368/9).

● Scaffolding (Great Britain) Ltd. have formed a new subsidiary company known as SGB Shuttering Ltd. of Willow Lane, Mitcham, Surrey (telephone: Mitcham 3400). The new company will carry on the full activities of the parent company's shuttering division and Mr. A. G. Chase has been appointed managing director. Other members of the board are Mr. N. L. Clifford-Jones and Mr. R. I. Beck, with Mr. R. D. Halsall as company secretary.

● The new Potterton BOA series oil-fired boiler (New Products—23/9/59) was launched to the trade on October 1, 1959. On that evening all the 66 Potterton appointed distributors held a reception in honour of the new appliance. In all, the guests numbered over 4,000 and included heating engineers, master plumbers and builders.

● The process of modernizing the older houses and flats owned by the Sutton Dwellings Trust was continued during last year according to the annual report for 1958 which has just been issued. Small extension schemes are in hand at Bradford, Plymouth and Middlesbrough, whilst further work is contemplated at Stoke-on-Trent and Salford. A completely new estate is projected at Bolton. The Trust now owns 8,067

dwellings, comprising 4,242 houses and 3,825 flats, and its capital fund now amounts to £4,466,194.

● Mr. E. G. Brooks, the managing director of Thomas Potterton Ltd., has been appointed a director of The De La Rue Co. Ltd.

● The London and Tottenham offices of H. V. Smith & Co. Ltd. have been amalgamated and now occupy new premises at Walkden House, Melton Street, London, N.W.1 (telephone: Euston 9292).

● Mr. P. E. Jackson, of 54 Station Road, Shirehampton, has taken over the South Wales area as technical sales engineer for Erskine, Heap & Co. Ltd., of Lancashire Switchgear Works, Manchester, 7. He will also continue to cover the west of England area.

● Mr. H. A. Parrott has been appointed assistant home sales manager of the Cable Division of Siemens Edison Swan Ltd. He succeeds Mr. R. B. Tucker who has resigned from the company.

● A new company, F. H. Bourner (Fixings) Ltd., of Manor Royal, Crawley, Sussex, has been formed to handle the development, research, sales and service activities of the Tool Division of the Bourner Organization.

● Teddington Industrial Equipment Ltd. have appointed Dr. T. Bedford as consultant on heating, ventilating and air conditioning. Dr. Bedford has retired from the position of Director of the Medical Research Council's Environmental Hygiene Research Unit.

● Allied Ironfounders Ltd. have made two new appointments to their Domestic Appliances Division, Mr. L. J. Sinden, formerly sales manager of Aga, and Mr. K. F. Stone, formerly Rayburn sales manager, have respectively become deputy sales director and sales manager of the Division.

● Sealocrete Products Ltd. have developed and are marketing Plazcrete, an additive for retarding the initial and final sets of concrete some two or three times. The company claims that its use will increase the aggregate cement ratio without detracting from the strength of the concrete. It will also reduce the water/cement ratio and increase the workability of the concrete.

ADDENDUM

7½ per cent should be added to the prices of copper tubes and capillary type connections and five per cent to the measured rates of copper tubes which appeared, respectively on pp. 380 and 384 of our issue of 28/10/59.

NEW PRODUCTS

In this feature are reviewed new lines introduced to the building industry for the first time and additions or improvements to existing ones. Any advantages claimed for a product are from information supplied by the manufacturer

Stainless Steel Urinals (A)

A range of urinals is now being fabricated from acid-resisting stainless steel. They are robustly made, though light in weight, and so can be quickly and easily installed, without floor reinforcement. Seamless construction is used throughout so that there is no leakage and the only maintenance required is regular washing down with soap and water. The urinals are available with deep or medium stalls, or with plain flat backs, in rows containing from two to six. All have chromium-plated sparge fittings and downpipe, with an optional automatic flushing cistern in stainless steel.

Associated Metal Works (Glasgow) Ltd., 30 St. Andrews Square, Glasgow, C.1. Bell 2004.

Readers' Information Service, Ref. A. Date 4/11/59.



B

Electric Spin Dryer (B)

The Spinette electrically operated spin dryer embodies unique safety features. As soon as the hinged outer lid is raised the machine is automatically switched off and a powerful brake is applied to the rotating drum. In addition, an inner lid is fitted which cannot be removed whilst the drum is revolving. Water is expelled from the machine through a slot around the inside of the drum and thence to flexible drain outlet which is situated high enough to discharge into a household bucket. The absence of drum perforations helps towards silence of operation and the safe handling of delicate fabrics. The Spinette has a dry loading capacity

of 4½/5lb of clothes which is spun dry in up to four minutes, dependent upon type of fabrics. The machine is powered by a ½ h.p. high torque split phase motor operating at 1,425 r.p.m. The rotating drum is of anodized aluminium with a stove enamelled steel outer casing. Finish: white or cream. Electrical supply: 200/250 V., A.C., 50 cycles. Overall measurements: 16½ in wide by 23½ in high. Retail price: £24 (including purchase tax).

Easiclene Porcelain-Enamel (1938) Ltd., P.O. Box No. 10, Darlaston, Wednesbury, Staffs. James Bridge 3131.

Readers' Information Service, Ref. B. Date 4/11/59.



New Electric Convector (C)

The HEC3 portable electric convector heater is similar to the HEC2 model in design but is more compact and has a lower output rating. The new model has a 1.2kW black heat element and a two-heat switch, so that it can operate either at full load or at 600W. The control is on the side and there is a foldaway carrying handle. A 6ft three-core flexible cable is provided and the heater is at present available only in the 230/250V a.c. range. Overall measurements: 24 in long by 22 in high (including feet) by 3½ in deep. Weight: 12lb. Finish: pale cream or grey stoved enamel, with top grille and sides in gold anodized metal. Price: £8 19s 11d (including purchase tax).

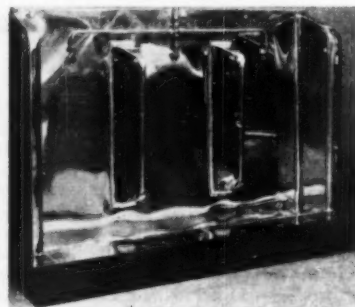
Hursel Ltd., 229 Regent Street, London, W.1. Regent 1051.

Readers' Information Service, Ref. C. Date 4/11/59.



Laminated Glassfibre Sheetting

Verplex is a decorative sheeting made from laminated glassfibre. At present all the sheeting is lightly reeded but it is expected that plain sheets will shortly be available. There are two types, the first in a very large range of plain colours, both translucent and opaque, and the second is patterned sheeting, some being translucent and others opaque. Possible applications of Verplex would appear to include shop fittings, shop, counter and bar fronts, screens,

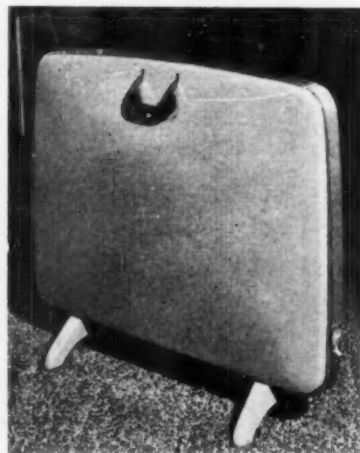


A

partitioning, diffused panel lighting, outdoor canopies and awnings, display stands, bath and shower panels, murals and false ceilings. The sheeting is seen to best advantage, from a decorative point of view, when lighted from behind by either daylight or artificial lighting. In the latter case, the light source should be kept as far away from the sheeting as possible and filament strip or fluorescent lighting is the most suitable medium. The sheeting can be stuck to any flat surface with Evostick or similar contact adhesive or can be nailed, providing that holes are drilled before fixing takes place. Verplex is supplied in sheets measuring 6ft by 3ft and in three weights. In the plain range normal weight sheets cost 3s 9d per sq ft, medium weight sheets 4s 3d per sq ft and heavy weight sheets 4s 9d per sq ft. Fire resistant quality sheets cost 7d per sq ft extra. The patterned sheeting is not held in stock but samples are available and prices depend upon the pattern chosen. A special standard commercial sheet is produced which costs from 5s per sq ft upwards, depending upon the design and glassfibre content.

E. & H. Universal Laminated Plastics Ltd., 184 Royal College Street, London, N.W.1. Gulliver 3681.

Readers' Information Service, Ref. D. Date 4/11/59.



C

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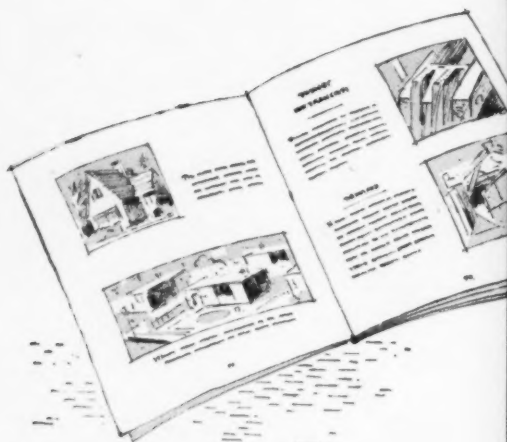
92/93

GROUND FLOOR, GRAND HALL, ROW E, OLYMPIA

Armstrong
CORK COMPANY LTD.

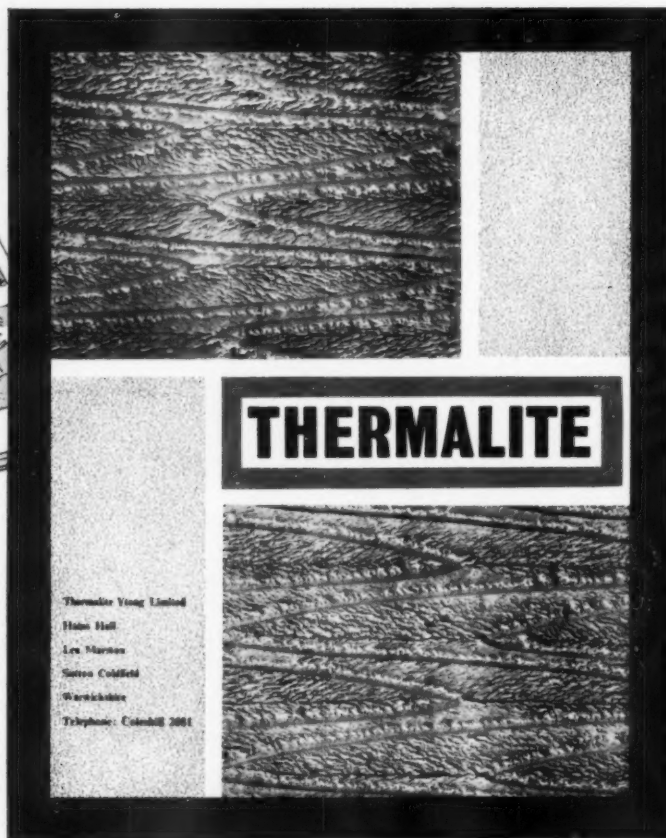
Flooring Dept., Bush House, Aldwych, London, W.C.2 Tel.: COVent Garden 1101
Acoustics Dept., Kingsbury, London, N.W.9 Tel.: COLindale 2080

ALL THE TECHNICAL INFORMATION IS HERE....



*you are invited
to write for a
copy...*

The contents include: basic data, details and properties (including thermal, acoustic and fire resistance figures), building practice (including recommended mortars, rendering, finishing, decorative treatments, tiling and joinery fixtures), comparative thermal values, load distribution, partition details and laying rates.



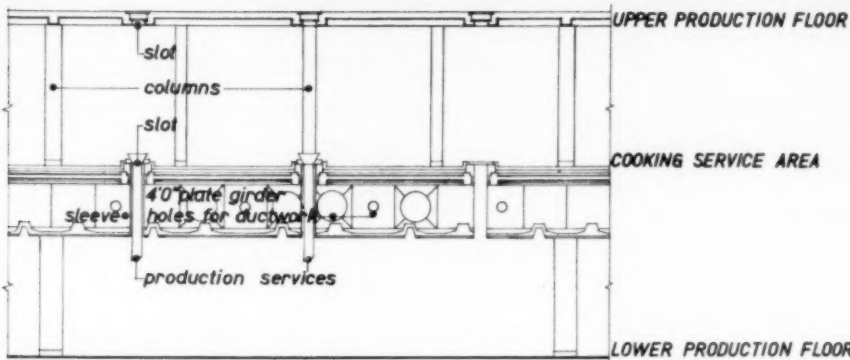
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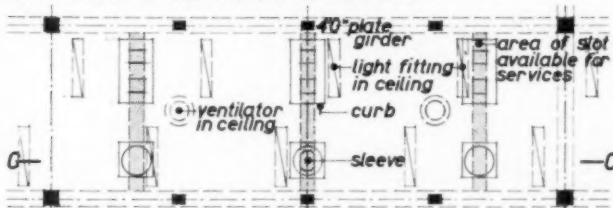
THERMALITE YTONG LTD., Hams Hall, Lea Marston, Sutton Coldfield, Warwickshire
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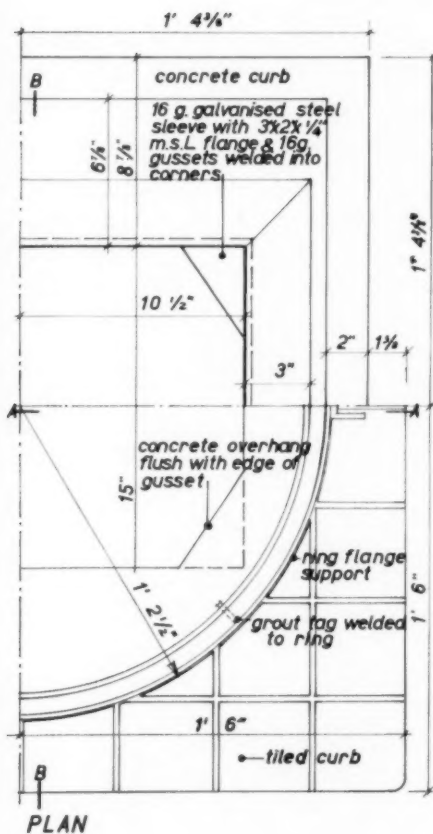
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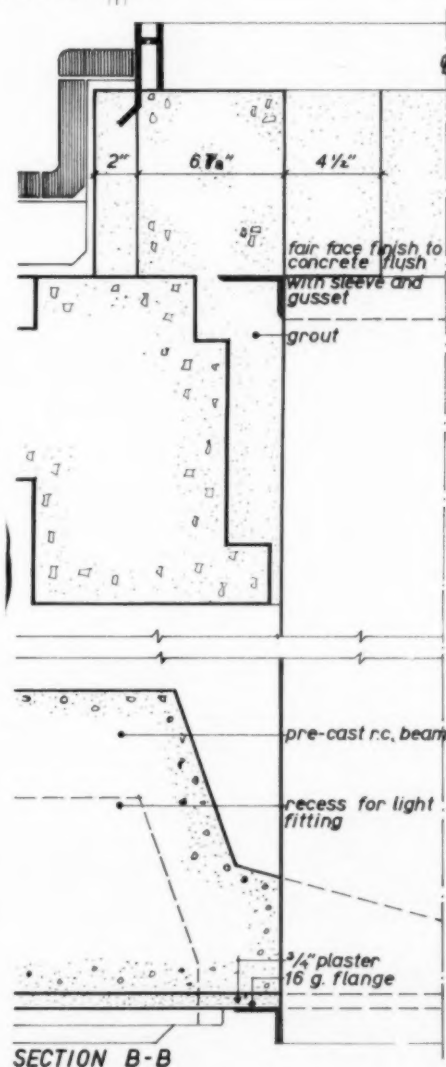
PART TYPICAL SECTION C-C 1/16"=1'0"



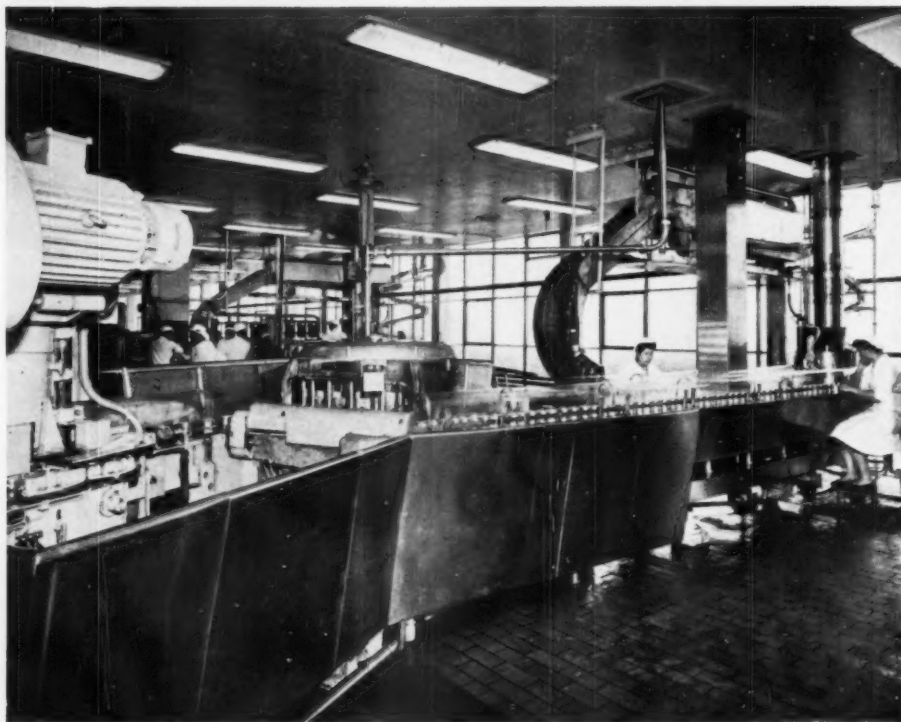
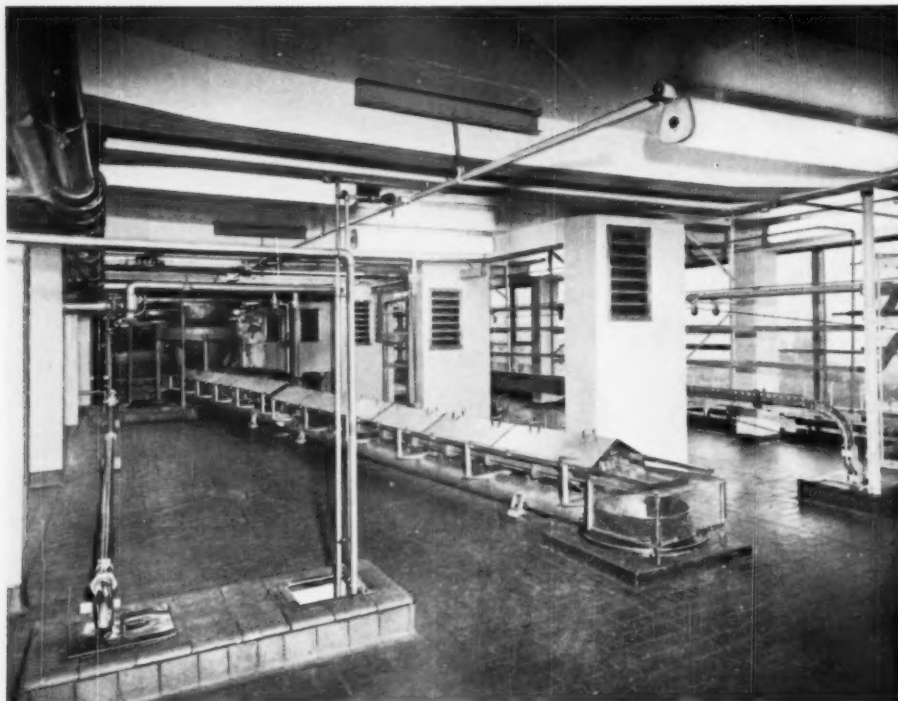
PART TYPICAL PLAN 1/16"=1'0"



DETAILS OF TYPICAL SLOT IN FLOOR 1/8 FULL SIZE



SECTION A-A



In the main production building of the Heinz factory at Kitt Green, the cans enter at mezzanine level and are passed through to the lower production floor where required, to be filled with food which has been prepared on the upper production floor. Continuous slots at 16ft centres are constructed in the mezzanine floor to provide flexibility for possible production replanning. The columns are faced in yellow glazed tiles, the floors, which are laid to falls and provided with drainage channels and gulleys, are in red pavior bricks, and the ceilings are finished with a continuous plastic membrane, sprayed on, and are white. Architects: J. Douglass Mathews and Partners



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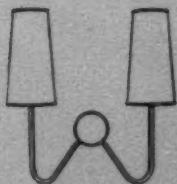
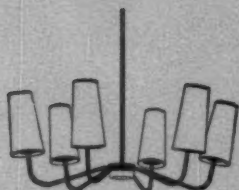
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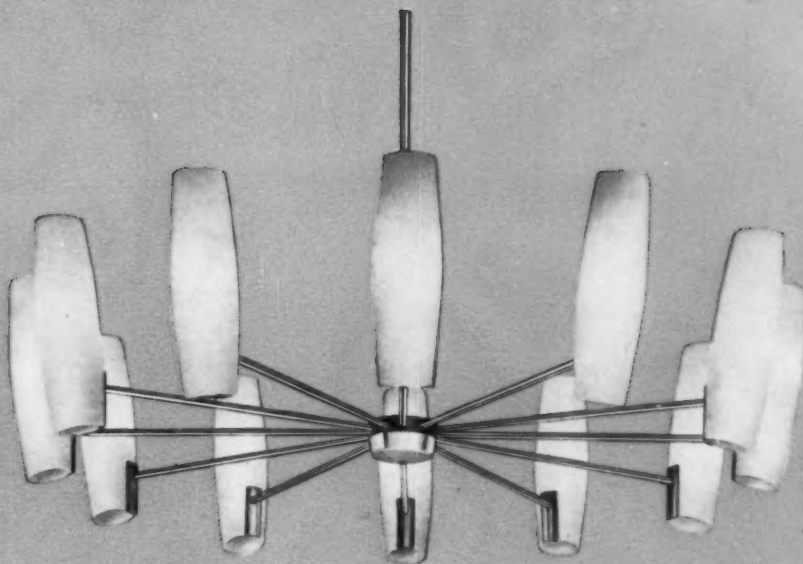
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Notes below give basic data of contracts open under locality and authority which are in a bold type. References indicate: (a) type of work (b) address for application. Where no town is stated in the

CONTRACT • NEWS •

address it is the same as the locality given in the heading (c) deposit (d) last date of application (e) last date and time for submission of tenders. Full details of contracts marked * are given in the advertisement section.

OPEN BUILDING

ABINGDON B.C. (a) Erection of a housing estate of 44 houses, extending the Gainsborough Green estate. (b) Alan Roscoe-Hudson, Market Place, Faringdon, Berks. (c) 2gn. (e) November 16.

BEDLINGTONSHIRE C.C. (a) Design, supply and erection of 19 shop fronts for 19 shops at Guide Post Clearing Area. (b) Engineer and Surveyor, Council Offices, Bedlington. (e) November 24.

BELFAST C.C. (a) Erection and completion of 369 dwellings at Turf Lodge No. 2 estate. (b) Housing Architect's Department, 97 Townsend Street, Belfast. (c) £5. (e) November 17.

BUCKS C.C. (a) Erection of a branch library at Amersham. (b) County Architect, County Offices, Aylesbury. (c) 3gn. (e) November 9.

BOSTWICK METALWORK OF EVERY DESCRIPTION and OUTSTANDING EXCELLENCE

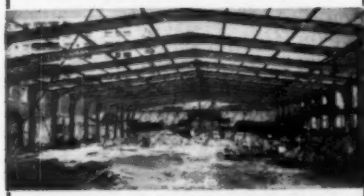
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Telephone: LADbroke 3661

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CATERHAM AND WARLINGHAM U.C. (a) Adaptation of existing house into seven small flats. (b) Engineer and Surveyor, Council Offices. (e) November 10.

CHATHAM. (a) Erection of an old people's home (24 flatlets) at Palmerston Road. (b) Borough Surveyor, Town Hall. (c) 2gn. (e) November 30.

CREWEKERNE U.C. (a) Erection of four houses, Long Lane, and seven houses, Langmead Place. (b) Peter Warren & Roydon Cooper, The Oxford Inn, West Handford, Yeovil. (c) 2gn.

CUCKFIELD R.C. (a) Erection of a block of four traditional dwellings at Anstye. (b) Engineer and Surveyor, Rural Council Offices, Boltre Road, Haywards Heath, Sussex. (c) 2gn. (e) November 9.

DAGENHAM B.C. (a) Erection of 110 bungalows, 42 semi-bungalows, 24 houses, 12 old people's bungalows, two flats, four shops and 47 garages at Canvey Island, contract 4. (b) Borough Engineer and Surveyor, Civic Centre. (c) 2gn. (e) November 27.

DONCASTER B.C. (a) Erection of an aged persons' hostel at Cantley. (b) Borough Architect, 15 South Parade, Doncaster. (c) 5gn. (e) November 13.

DONCASTER B.C. (a) Erection of two blocks of four-storey flats, totalling 16 flats. (b) Borough Architect, 15 South Parade. (c) 5gn. (e) November 16.

DURHAM C.C. (a) Erection on a vacant site at 54-55 Claypath of a three-storey block of three flats. (b) City Engineer, Town Hall. (c) 2gn. (e) November 12.

EALING B.C. (a) Erection of 12 flats at Windmill Road-Darwin Road, Ealing, W.5. (b) Borough Surveyor, Town Hall, W.5. (c) £5. (e) November 19.

EAST RETFORD B.C. (a) Conversion of West Retford Hall into ten flats. (b) Borough Surveyor, Municipal Offices. (c) 2gn. (e) November 23.

EAST RIDING OF YORKSHIRE C.C. (a) Additions to Woodmansey C.E. School and house. (b) County Architect, County Hall, Beverley. (c) 2gn. (e) December 1.

EAST SUSSEX C.C. (a) Erection of a two-storey wing consisting of a laboratory, art room and cloakroom at Bexhill County Grammar School. (b) County Architect, County Hall, Lewes. (d) November 2. (e) November 17.

EAST SUSSEX C.C. (a) Erection of four classrooms, cloakrooms and alterations at Hellingby C.E. School. (b) County Architect, County Hall, Lewes. (d) November 2. (e) November 19.

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EIRE, DUBLIN V.E.C. (a) Building of a Vocational School at Tallaght, for County Dublin Vocational Education Committee. (b) Mr. B. O'Connor, 32 Fitzwilliam Square, Dublin. (c) 10gn. (e) November 6.

EIRE, GALWAY CORPORATION. (a) Erection of a new City Abattoir at Galway for Galway Corporation. (b) Chevalier P. J. Sheahan, 47 O'Connell Street, Limerick. (c) 50gn. (e) December 11.

EIRE, LOUTH C.C. (a) The erection installation of the pumping, filtration and chlorination plant rated at 1,000 gallons per minute, including electric motors, ancillary equipment and pipe-work for Louth County Council. (b) Thomas P. McGahon, Architect, 9-18 Exchange Buildings, Dundalk, Co. Louth. (c) 20gn. (e) November 30.

EIRE, LOUTH C.C. (a) The Erection of a swimming pool, dressing rooms, pump house, spectator terrace, entrance building, and boundary wall at Blackrock, Dundalk, Co. Louth for Louth County Council. (b) Thomas P. McGahon, 9-18 Exchange Buildings, Dundalk, Co. Louth. (c) 20gn. (e) November 30.

EIRE, TIPPERARY (S.R.) C.C. (a) Construction of "Aras Ui Threasaig" (Sean Treacy Memorial Hall) at Main Street, Tipperary for Tipperary (South Riding) Co. Council. (b) Mr. T. C. Whelan, National Bank Chambers, Cavendish Row, Dublin. (c) 10gn. (e) December 10.

EIRE, WATERFORD. (a) Alterations and additions at St. Joseph's Convent National Schools, Parnell Street, Waterford for the Sisters of Charity. (b) Henry D. W. Boyd, 28 Upper Baggot Street, Dublin. (c) £5. (e) November 14.

GUILDFORD B.C. (a) Erection of a public mortuary and post mortem building at Woodbridge. (b) Borough Engineer and Surveyor, Municipal Offices, High Street. (c) December 2.

HAVANT AND WATERLOO U.C. (a) 78 dwellings comprising 36 houses, three blocks of eight flats and 18 bungalows at Waterlooville. (b) Engineer and Surveyor, 1 Park Road North, Havant, Hants. (c) November 16.

HEREFORD B.C. (a) Erection of 112 two-storey houses, 10 aged persons' bungalows and 72 garages at Redhill. (b) Housing Architect, Town Hall. (c) 2gn. (e) November 16.

KINGSWOOD U.C. (a) (1) 47 garages with site works on four sites. (2) Erection of 21 bungalows at Lees Hill. (b) Engineer and Surveyor, Council Offices, Kingswood, Bristol. (c) £10. (e) November 11.

LEEDS REGIONAL HOSPITAL BOARD. (a) Conversion of former kitchen to dining room. Claypenny Hospital, Easingwold. (b) Architect to the Board, Park Parade, Harrogate. (c) 2gn. (d) Immediately. (e) November 18.

LEICESTERSHIRE C.C. (a) First instalment of proposed Glenfield junior school. (b) County Architect, 123 London Road, Leicester. (d) November 5. (e) January 1, 1960.

LIVERPOOL C.C. (a) Erection of a bowls pavilion at Kirkdale Recreation Ground, Liverpool, 4. (b) City Architect and Director of Housing, Kingsway, Liverpool, 2. (c) 2gn. (e) November 10.

LUTON B.C. (a) Erection of 40 houses at Lewsey Farm estate. (b) Borough Architect, Town Hall. (d) October 30. (e) November 20.

MACCLESFIELD B.C. (a) Erection of 19 dwellings and community building at Whalley Hayes. (b) Borough Architect, 3 Jordangate. (c) 2gn. (e) November 16.

MIDDLESBROUGH B.C. (a) Ten bungalows, 32 flatlets and four houses at Albert Cock's Home, Thorntree. (b) Borough Engineer, Town Hall. (c) 2gn. (e) November 9.

NORTHAMPTON B.C. (a) Erection of four additional classrooms at Cherry Orchard School. (b) Borough Architect, Guildhall. (c) 2gn. (e) December 2.

NORTH RIDING OF YORKS C.C. (a) Erection of a family group children's home at Golf Course estate, Haxby. (b) County Architect, County Hall, Northallerton. (c) November 16.

NORTH RIDING OF YORKSHIRE C.C. (a) Erection of Saltburn County Modern School. (b) F. Barraclough, County Hall, Northallerton. (e) November 13.

OLDBURY C.C. (a) Erection of 10 aged persons' bungalows at Springfields Road. (b) Borough Engineer and Surveyor, Municipal Bank Chambers, Birmingham Street, Oldbury. (c) 2gn. (e) November 16.

PORT TALBOT B.C. (a) Erection of a public convenience at the Promenade, Sandfields, Aberavon. (b) Borough Engineer, Municipal Buildings. (c) 2gn. (e) November 10.

RADCLIFFE B.C. (a) Erection of conveniences and bus shelter, in brick construction, at Ainsworth. (b) Borough Surveyor, Town Hall, Radcliffe. (c) November 7.

READING B.C. (a) Erection of 34 dwellings, comprising 18 houses and 16 flatlets, with eight garages, in Bickingham Drive, Emmer Green estate. (c) 2gn. (e) November 23.

READING B.C. (a) Erection of extensions to, and alterations at, the aged persons' home at 3 Albert Road, Caversham. (b) Borough Architect, Town Hall. (c) 2gn. (e) November 16.

RUTLAND C.C. (a) Extensions to Oakham Secondary School, including four classrooms, art room, staff rooms, dining hall and kitchens, indoor swimming pool, etc. (b) County Architect and Planning Officer, County Offices, Oakham. (c) 2gn. (e) November 16.

SAFFRON WALDEN R.C. (a) Four bungalows at Quendon and Rickling. (b) Clerk of the Council, Council Offices, Debden Road, Saffron Walden, Essex. (c) November 14.

SALE B.C. (a) Erection of 32 dwellings. (b) Borough Engineer, Town Hall. (c) 2gn. (e) November 9.

SALFORD C.C. (a) New kitchen extension at Sorrel Bank Dining Centre, Langworthy Road. (b) City Engineer and Surveyor, Town Hall. (c) 2gn. (e) November 10.

SHIPLEY U.C. (a) Construction in brick with precast concrete floors and roof of six blocks of three-storey flats, comprising 48 one-bedroom and 21 bed-sitting room flats at Crag Road. (b) Surveyor, Town Hall. (c) 5gn. (e) November 13.

SOUTHEND-ON-SEA B.C. (a) Erection of a ground floor ladies' convenience at Bellairs Park, Leigh-on-Sea and incidental works. (b) Borough Architect, 30 Alexandra Street, Southend-on-Sea. (e) November 11.

SUNDERLAND B.C. (a) Erection of first phase of Seaburn comprehensive school, comprising an assembly hall, three-storey house block, four-storey science block, gymnasium, swimming bath and heating chamber, with caretaker's house and external works. (b) Borough Architect, Grange House, Stockton Road. (c) 2gn. (e) November 27.

TEIGNMOUTH U.C. (a) Construction of sea front shelter and bandstand at The Den. (b) Surveyor, Council Offices, Bitton House, Teignmouth. (e) November 19.

ULSTER, MINISTRY OF COMMERCE. (a) Construction of a factory at Lake Street, Lurgan, Co. Cormagh, for Ulster Ministry of Commerce. Room 28, Chichester House, Belfast. (c) £3. (e) November 10.

WALLASEY B.C. (a) Erection and completion of 17 houses and six two-storey flats at Rankin Street. (b) Borough Architect, Town Hall. (e) November 19.

WEDNESFIELD U.C. (a) Scheme "M". Erection of 54 dwellings in traditional construction on Ashmore Park Estate. The dwellings are to be constructed on a reinforced-concrete raft. (b) Engineer and Surveyor, 29 Bolton Road, Wednesfield, Staffs. (c) 3gn. (e) November 16.

WIMBORNE AND CRANBORNE R.C. (a) Erection of buildings and works in two separate contracts of 11 bungalows and five old persons' dwellings. (b) Clerk of the Council, Council Offices, Furzhill, Wimborne, Dorset. (c) 2gn. (e) November 10. The site is at Tricketts Cross estate, Ferndown.

ULSTER — MINISTRY OF COMMERCE. (a) Construction of factory at Lake Street, Lurgan, Co. Cormagh, for Ulster Ministry of Commerce. Room 28, Chichester House, Belfast. (c) £3. (e) November 10.

WALLINGFORD R.C. (a) Two three-storey extensions, each comprising six all-electric flats at the ends of the existing three-storey block of shops and flats in Abbott Road, Didcot. (b) Leechor & Stamford, 14 Park End Street, Oxford. (c) 2gn. (e) November 16.

PLACED

Notes on contracts placed state locality and authority in bold type with (1) type of work (2) site, (3) name of contractor and address, (4) amount of tender or estimate. † denotes that work may not start pending final acceptance, or obtaining of licence, or modification of tenders, etc.

ACTON B.C. (1) Block of 46 flats and maisonnettes. (2) Hanbury Road. (3) E. J. Marston & Sons Ltd., 1 Stephendale Road, Fulham, S.W.6. (4) £115,681.

ALCESTER R.C. (1) 30 houses. (2) Bidford-on-Avon. (3) C. Bryant & Son Ltd., 65 Whitmore Road, Birmingham. 10. (4) £48,735.

BATTERSEA B.C. (1) 96 dwellings. (2) Austin Road scheme, stage 2. (3) M. J. Gleeson (Contractors) Ltd., Haredon House, North Cheam, Surrey. (4) £232,718.

BRADFORD C.C. (1) 201 and 118 dwellings. (2) Manchester Road and Park Street. (3) George Wimpey & Co. Ltd., Hammersmith, London, W.6. (4) £457,000 and £249,000, respectively.

BRISTOL UNIVERSITY. (1) Erection of a women's hall of residence. (2) Clifton Hill House. (3) John Perkins & Son Ltd., of Bristol. (4) £225,000.

BRISTOL C.C. (1) 100 flats and maisonnettes. (2) Redcliffe. (3) Richard Costain Ltd., 111 Westminster Bridge Road, London, S.E.1. (4) £271,592. (1) 117 dwellings. (2) Penpole. (3) John Knox (Bristol) Ltd., Bristol. (4) £252,244. (1) 102 flats and maisonnettes. (2) Penpole. (3) Wm. Cowlin & Sons Ltd., Bristol. (4) £243,676.

BURY ST. EDMUNDS B.C. (1) Construction of sewage disposal works. (2) Fomham, All Saints. (3) Humphreys Ltd., 199 Knightsbridge, London, S.W.7. (4) £299,254.

CAMBRIDGE. (1) Undergraduate accommodation for Queen's College. (3) William Sindall Ltd., of Cambridge.

CANNOCK, STAFFS. (1) Headquarters building, service and supply depot, for Bomaker Plant Ltd. (3) T. T. Construction Ltd., London. (4) About £332,000.

CARDIFF C.C. (1) 48 flats. (2) Llanrumney estate. (3) J. North & Sons Ltd., Plasnewydd, Rumney, Cardiff. (4) £97,018. (1) 48 maisonnettes in "No Fines" construction. (2) Llanrumney. (3) Geo. Wimpey & Co. Ltd., Newport Road, Cardiff.

CARLISLE. (1) Construction of a marshalling yard for British Railways (London-Midland Region). (2) Kingmoor. (3) Whatlings Ltd., of Glasgow. (4) Total cost £4,750,000.

CHESTERFIELD B.C. (1) 62 houses. (2) Dunston Hall estate. (3) W. H. Frearson & Sons Ltd., Newbold, Chesterfield. (4) £70,900. (1) Science block. (2) Chesterfield School. (3) A. Mason (Contractors) Ltd., Kirkland Avenue, Mansfield, Notts. (4) £55,156.

CO. TYRONE C.C. (1) Secondary school. (2) Omagh. (3) J. A. Gamble, Dock Street, Strabane, Co. Tyrone. (4) £174,061.

ECCELS B.C. (1) Extensions to sewage works. (2) Eccles. (3) Cubar Construction Co. Ltd., 32 Deansgate, Manchester, 3. (4) £109,219.

GREENWICH S.E. (1) Renovation works. (2) Royal Naval College. (3) Dove Bros. Ltd., 1 Cloudeley Place, London, N.1. (4) £200,000.

HASTINGS B.C. (1) 162 flats. (2) Halton area. (3) Ringmer Building Works Ltd., Ringmer, near Lewes. (4) £253,197.

HENDON B.C. (1) 55 dwellings. (2) Brent Street. (3) Geo. Wimpey & Co. Ltd., Hammersmith, W.6.

KENT. (1) Erection of a Trinity House lighthouse. (2) Dungeness. (3) Taylor Woodrow Ltd., Western Avenue, London, W.

LIVERPOOL. (1) Extensions to a factory for Huntley & Palmer Ltd. (2) Huyton. (3) Wm. Tomkinson & Sons Ltd., Liverpool. (4) About £250,000.

LONDON C.C. (1) Repairs, etc. to schools. (2) Friern County and Goodrich County, Camberwell. (3) Giggs & Chapman Ltd., Croydon. (4) £58,390.

LONDON, CITY. (1) Five-storey block of offices for National Mutual Life Assurance Society. (3) Bow Churchyard and Watling Street, E.C. (3) Carmichael (Contractors) Ltd., Trinity Road, London, S.W.9.

MAIDENHEAD B.C. (1) Development. (2) Cox Green estate. (3) Orchard & Peer (London) Ltd., Smiths Lane, Windsor. (4) £60,168.

MAIDSTONE B.C. (1) Erection of 160 flats. (2) Park Wood estate. (3) H. Richardson & Sons Ltd., Slades Green Road, Erith, Kent. (4) £241,240.

MARYPORT U.C. (1) Erection of 70 houses, 10 aged persons' bungalows, etc. (3) Thomas Armstrong Ltd., South Street, Cockermouth. (4) £95,300.

MIDDLESEX C.C. (1) Enlargement and adaptation. (2) Acton County School. (3) Prestigue & Co. Ltd., Grosvenor Road, London, S.W.1. (4) £118,761.

NEWCASTLE-ON-TYNE. (1) Construction of a research block. (2) King's College, for Durham University. (3) John Laing & Son Ltd., Dalston Road, Carlisle.

NORTH DEVON. (1) Erecting a permanent R.E.M.E. depot, for the War Department. (2) Instow. (3) E. H. Burgess Ltd., 34 Grosvenor Gardens, London, S.W.1. (4) About £200,000.

NORWICH C.C. (1) Contract No. 6 of the new Cattle Market. (2) Harford. (3) R. G. Carter Ltd., Drayton, Norwich. (4) £161,072. Work includes erection of shops, offices, restaurant and ancillary buildings.

NUNEATON B.C. (1) Erection of school. (2) South school. (3) G. W. Deeley Ltd., Torrington Avenue, Tile Hill, Coventry. (4) £94,314.

PETERBOROUGH C.C. (1) Erection of a home for aged persons. (2) Alderman Drive. (3) Granville Building Co. Ltd., Russell Street, Peterborough. (4) £39,575.

PORTSMOUTH C.C. (1) Flats, shops and maisonnettes. (2) Various sites. (3) Faulkners, 113a London Road, Waterlooville, Hants. (4) £26,625, £22,950 and £33,575.

PRESCOT U.C. (1) 62 houses and 68 maisonnettes. (2) Derby Road. (3) Unit Construction Co. Ltd., Speke Boulevard, Liverpool. (4) £222,185.

REIGATE B.C. (1) Erection of 24 flats. (2) The Dome Estate, Redhill. (3) Godalming Building and Construction Co. Ltd., Godalming, Surrey. (4) £30,667.

SHEFFIELD C.C. (1) Primary school. (2) Rolleston. (3) J. E. Finnegan & Co. Ltd., 847 Eccleshall Road, Sheffield, 10. (4) £104,738. (1) Secondary school. (2) Gleadless Valley. (3) J. E. Finnegan Ltd., address as above. (4) £192,118.

SOUTHAMPTON B.C. (1) 196 flats. (2) Northern redevelopment area. (3) G. T. Crouch Ltd., Kingston House, Crawley, Sussex. (4) £333,023.

TORQUAY B.C. (1) Erection of a theatre and ancillary buildings. (2) Princess Gardens. (3) R. E. Narracott & Sons Ltd., Dunmere Road, Torquay. (4) £94,576.

TOTTENHAM B.C. (1) Development of housing site. (2) High Road, etc. (3) Hawker-Smith Ltd., 1 West Street, Erith, Kent. (4) £94,003.

WANDSWORTH B.C. (1) Five-storey block of 30 flats. (2) Wendelsworth estate. (3) The Anglo-Scottish Construction Co. Ltd., 112a Coombe Lane, London, S.W.20. (4) £81,511.

WESTMINSTER C.C. (1) Block of flats. (2) Hyde Place scheme. (3) John Laing & Son Ltd., Mill Hill, London, N.W.7. (4) £392,264. (1) Housing scheme. (2) Berwick Street, W. (3) Wates Ltd., 1258 London Road, London, S.W.16. (4) £345,521.

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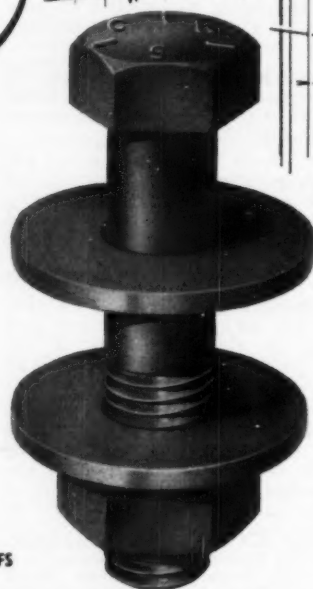


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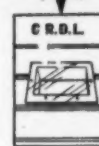
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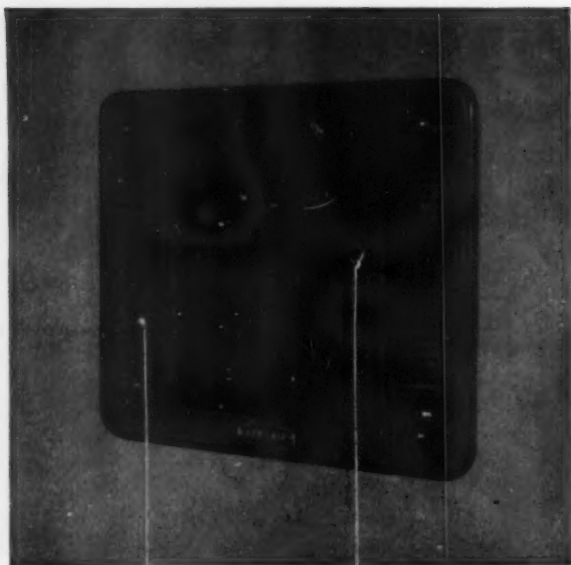
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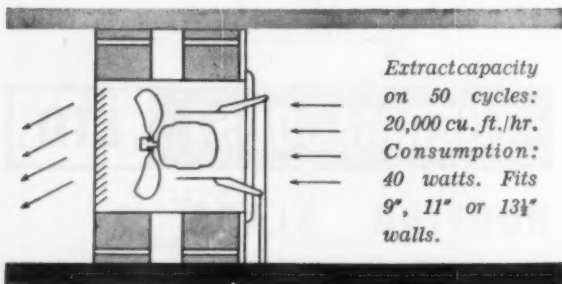
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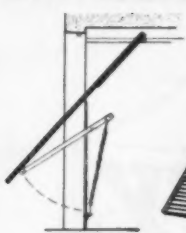
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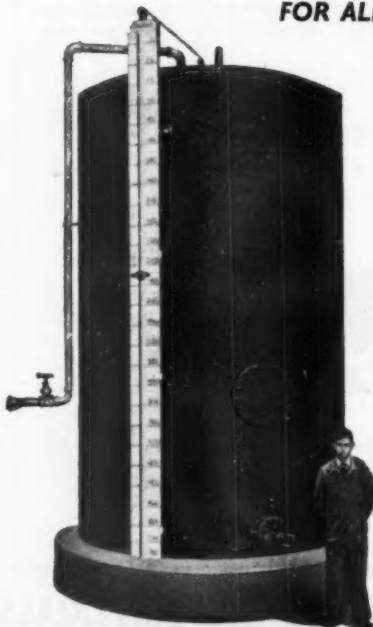
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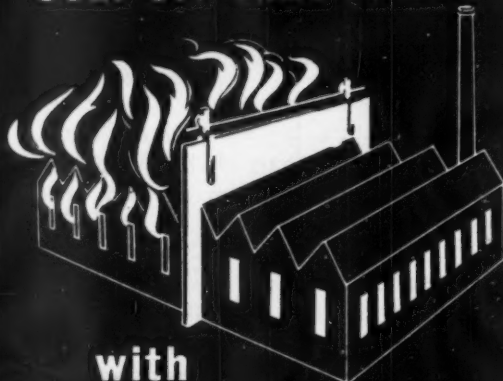
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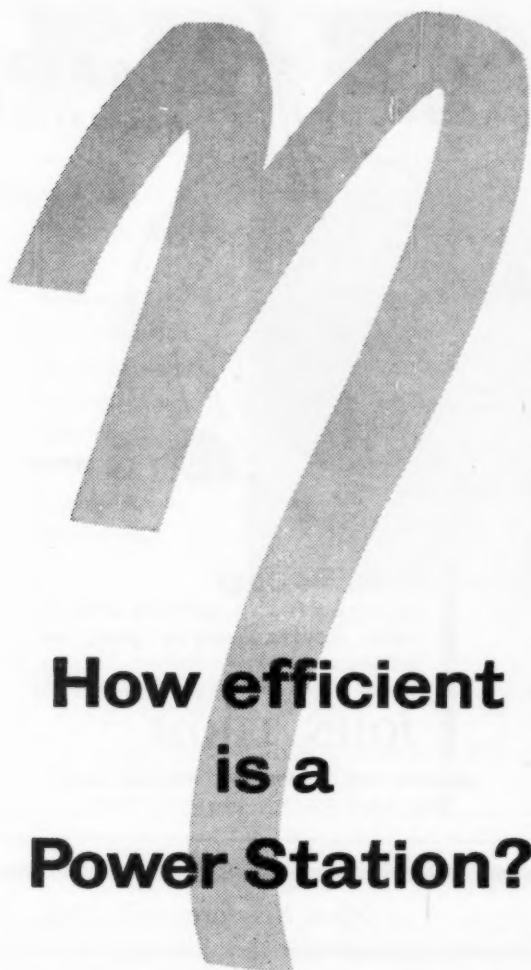
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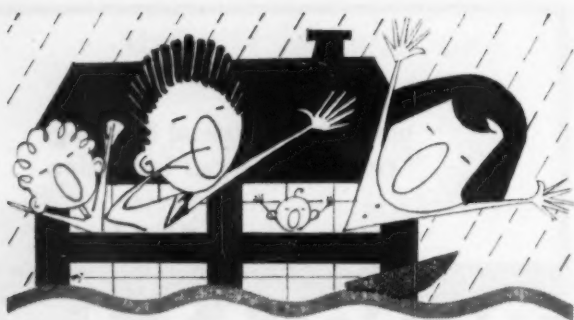
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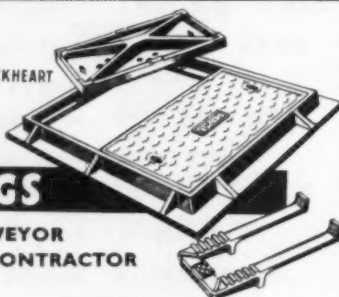
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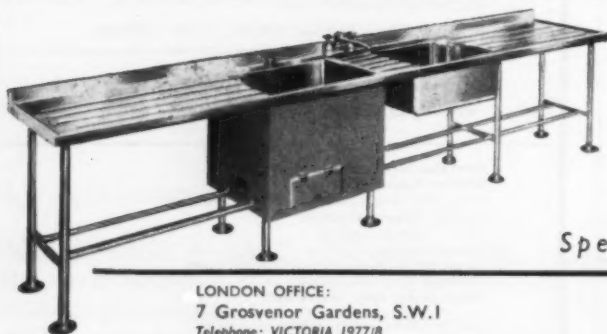


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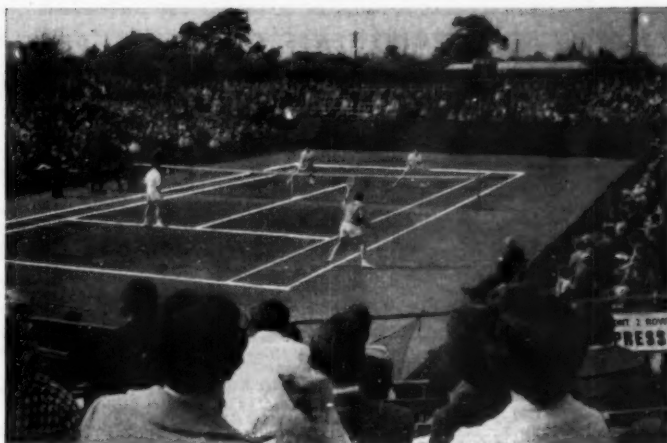
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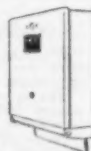
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Paddington, W.2. [5771]

SURVEYORS (Basic Grade)

REQUIRED by Ministry of Works in Birmingham and Manchester. National salary scale £805 (at age 25) to £1,260 per annum. Starting pay up to £1,095 p.a. (at age 34) according to age and experience. Five-day week, 22 days' annual leave. Prospects of promotion and opportunities for permanent and pensionable posts.

Applicants should be Registered Architects by examination or Corporate Members of the R.I.C.S. (Building Section). Apply stating age, qualifications and full details of experience to Chief Maintenance Surveyor (Recruitment (A)), M.O.W., Stanley House, Marsham Street, London, S.W.1. [5755]

City of Sheffield APPOINTMENT OF SENIOR GROUP LEADER ARCHITECT (EDUCATION)

Salary scale: £1,215 x £60(2) x £55(2)—£1,445. APPLICATIONS are invited for the above-mentioned appointment on the permanent staff of the City Architect, Mr. J. L. Womersley, F.R.I.B.A., Dist.T.P., M.T.P.J.

The post ranks next to the Chief Assistant Architect and the successful candidate will be required to deputize for him as the occasion demands on education work, in addition to taking charge of a group responsible for the design and supervision to completion of major works on new schools and colleges.

Temporary housing accommodation available if required and reasonable removal expenses paid.

Applications, stating age, education and training, qualifications, experience, present and past appointments (with dates and salaries) and the names and addresses of two persons to whom reference may be made, should reach the undersigned by Monday, November 16, 1959.

JOHN HEYS, Town Clerk.

Town Hall,
Sheffield, 1. [5757]

City of Leeds APPOINTMENT OF CITY ARCHITECT

APPLICATIONS are invited for this appointment from persons with appropriate qualifications and experience.

The salary will be within the scale £3,200 per annum rising to £3,605 per annum by three increments of £135.

Notes on the appointment may be obtained from me; no special forms of application will be provided and applications for the appointment must reach me by December 7, 1959.

ROBERT CRUTE, Town Clerk.

Civic Hall,
Leeds, 1. [5758]

APPOINTMENTS (cont)

Corporation of Barking Department of the Borough Architect APPOINTMENT OF ARCHITECTURAL ASSISTANT

APT II (£765/£880 per annum)

THE commencing salary will be according to age and experience plus £20/£30 per annum London Weighting.

Further particulars and form of application may be obtained from the Borough Architect, Town Hall, Barking, and completed forms should reach the undersigned not later than 10 a.m. on Friday, November 13, 1959.

E. R. FARR, Town Clerk.

Town Hall,
Barking, Essex. [5761]

County Borough of Grimsby Borough Engineer and Surveyor's Department GENERAL ARCHITECTURAL ASSISTANT

APPLICATIONS are invited for the appointment of a General Architectural Assistant in the Architectural Section of the above Department in accordance with the Conditions of Service and Scale of Salary of the National Joint Council for APT Grade I (salary £610 rising to £765 per annum).

The appointment is terminable by one month's notice on either side, and is subject to the provisions of the Local Government Superannuation Acts. The successful candidate will be required to pass a medical examination.

Applications stating age, qualifications, details of training and experience, together with the names and addresses of two referees, must be delivered to the undersigned not later than Monday, November 16, 1959.

J. V. OLDFIELD, Borough Engineer and Surveyor.

Municipal Offices,
Town Hall Square,
Grimsby,
November, 1959. [5762]

Welsh Regional Hospital Board

APPLICATIONS from Registered Architects for post of Temporary Assistant Architect on staff of Regional Architect, 7 Museum Place, Cardiff, at a salary of £730 x £25(2) x £30(2) x £35(5) x £40(1) to £1,055. Age and experience can be taken into account in fixing the commencing salary.

Applicants must be Registered Architects and be well experienced in the preparation of 1/8 scale working drawings, details, specifications, surveying levelling and the supervision of contracts. The appointment (terminable by one month's notice on either side) will be subject to National Health Service Regulations and a successful medical examination.

Applications, giving full details and the names of two referees to Secretary, Welsh Regional Hospital Board, Temple of Peace, Cardiff, within 14 days of appearance of advertisement. [5769]

ARCHITECTURAL ASSISTANTS required by MINISTRY OF WORKS

For employment in London. Keen and enthusiastic assistants of Intermediate R.I.B.A. standard are required for the design of interesting and varied types of buildings in all parts of the world. The salary range is from £550 (at age 21) to £900. Starting pay according to age and experience. Five-day week. Three and a half weeks' annual leave. Good prospects of promotion and permanency. Permanent posts are pensionable and the pension scheme is non-contributory.

Apply, giving details of age, training and experience to: E. Bedford, C.B., C.V.O., A.R.I.B.A., Chief Architect, Ministry of Works, Room 435, Abell House, John Islip Street, London, S.W.1.

APPOINTMENTS (cont)

Borough of Harrow

APPOINTMENT OF BUILDING INSPECTOR
APPLICATIONS are invited for the above appointment in the Department of the Borough Engineer and Surveyor, within APT Grade II (£765/£880 per annum), plus London Weighting, commencing point according to qualifications and experience.

Applicants should have practical experience of the administration of building bye-laws and regulations made under the Petroleum Acts.

Possession of the Building Inspector's Certificate of the Institute of Municipal and County Engineers or similar qualification will be an advantage.

The appointment will be subject to the Local Government Superannuation Acts and the National Joint Council's Scheme of Conditions of Service. Housing accommodation is not offered. A contribution towards removal expenses will be considered.

Application forms, obtainable from me, should be returned by November 21, 1959.

D. H. PRITCHARD, Town Clerk.

Harrow Weald Lodge,
92 Uxbridge Road,
Harrow Weald,
Harrow. [5766]

ARCHITECTURAL ASSISTANTS INTERMEDIATE STANDARD

REQUIRED at St. Albans head office to work on industrial projects. Applicants must be able to prepare accurate working drawings with the minimum of supervision.

Permanent positions. Good salaries. Five-day week. Staff pension scheme. Telephone St. Albans 56011, Ext. 14, for application form. [5749]

London Electricity Board SENIOR DRAUGHTSMAN

APPLICATIONS are invited for the above position in the Board's Northern District at Clapton, E.5.

Candidates should have had training in engineering or building construction, possess the Ordinary National Certificate and be capable of preparing drawings and structural calculations for building and reinforced concrete work mainly associated with the conversion of existing premises into transformer chambers. Experience in the layout of equipment up to 11 kV would also be an advantage.

The post is graded under Schedule "D" of the National Joint Board Agreement as Grade 5 (£830/£940 per annum), inclusive of London Allowance.

Application forms obtainable from Personnel Officer, 46 New Broad Street, London, E.C.2, to be returned completed within 14 days from the publication date of this advertisement. Please quote ref. PER/V/2791/AA. [5772]

ASSISTANT ARCHITECTS required by Ministry of Works For employment in BRISTOL and LEEDS.

GENERAL CONDITIONS

Salary range between £805 (at age 25) and £1,260 per annum, on the National Scale. Starting point according to age, qualifications and experience. Five-day week. Annual leave four weeks and two days initially. Prospects of promotion and opportunities for permanent and pensionable posts.

QUALIFICATIONS

Candidates must be Registered Architects by examination, or Registered Architects who, since registration, have passed a professional examination in Architecture recognized by the Architects' Registration Council of the United Kingdom. They must also possess good professional experience.

APPLICATIONS

State age and full details of training and experience to Chief Architect, Ministry of Works (B), Room 435, Abell House, John Islip Street, London, S.W.1.

MISCELLANEOUS SECTION

RATE: 1/9d per line, minimum 3/6d, average line 6 words. Each para charged separately. Advertisements for Situations Wanted are accepted at the specially reduced rate of 6d. per line, minimum 1/6d.

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ARCHITECT'S office with varied, interesting work requires Assistants (Intermediate-Final standard) and Architectural Draughtsmen. Apply stating age, experience and salary required to F. Potter, F.R.I.B.A., 3 Vicarage Road, Edgbaston, Birmingham, 15. [5770]

ARCHITECTURAL ASSISTANT, London, Final standard. Industrial and commercial. Progressive and interesting. Salary according to experience and ability, Box 3667. [0079]

ARCHITECTURAL ASSISTANTS with office experience required immediately. About Intermediate or Equal standard. Good salary scale. L.V. and pension. Five-day week. Ley, Colbeck & Partners, F/R.I.B.A., F.R.I.C.S. LON 7282. [0206]

ARCHITECTURAL ASSISTANT, Intermediate standard. Busy London office. Good prospects. Box 3668. [0080]

ARCHITECTURAL ASSISTANT at Final standard required by Buckinghamshire office. Interesting and varied work with scope for initiative and responsibility. State age, experience and salary required to Box 5143. [0136]

ARCHITECTURAL ASSISTANTS required. Why travel to Town when I can offer two Assistants, Inter-Final Grade, first-class work on stores, office buildings, factories, dance halls, etc.? Five-day week, bonus scheme, luncheon vouchers. Use of cars on job visits and for summer holidays. Pleasant surroundings with easy access to Morden Underground and Southern Electric Merton Park Station. 146 Mostyn Road, S.W.19. Tel.: L1Berty 8181. [5745]

ARCHITECTURAL APPOINTMENTS VACANT (cont)

ARCHITECTURAL ASSISTANTS, Senior and Junior, required by firm in High Wycombe for commercial and industrial schemes. Scope for responsibility and experience. Five-day week. Write Box 5793. [0999]

ARCHITECTURAL DRAUGHTSMAN required for preparation of scale and full size details, in connection with the manufacture of decorative fibrous plaster work. Previous experience in this branch of the trade useful, but not essential. Apply in writing, stating age, experience, salary required, to: The Assistant Secretary, Trollope & Colls Limited, One Noble Street, Gresham Street, London, E.C.2. [5750]

ASSISTANTS of Intermediate or equivalent standard, required in busy City office. Interesting and varied work, offering scope for initiative and responsibility. Commencing salary up to £800 per annum, according to qualifications. Write Stewart & Hendry, F/R.I.B.A., A.M.T.P.I., 90 Fenchurch Street, E.C.3, or telephone Royal 6216/7. [0964]

ASSISTANT ARCHITECT required. Experienced on the maintenance of industrial buildings. Apply for further information to the General Manager, Lancashire United Transport Ltd., Atherton, Lancs. [5711]

COVELL & MATTHEWS

require capable and enthusiastic Senior and Junior Assistants to work on large central area redevelopment projects. Salary according to experience. Five-day week. Ring REGent 2291 [5552]

ARCHITECTURAL APPOINTMENTS VACANT (cont)

BOOTH, LEDEBOER & PINCKHEARD, 17-20 Mason's Yard, Duke Street, St. James's, S.W.1, require Assistants in salary range £750/£1,000 pa. Tel. TRA 1866. [0901]

EDINBURGH: Qualified Assistant wanted immediately for small expanding practice. Please write giving details of age, experience and salary required, to Law and Dunbar-Nasmith, 54 Frederick Street, Edinburgh. [5759]

FREDERICK GIBBERD'S London office requires two Architectural Assistants: one Intermediate and one Final standard. Write, giving experience and salary required, to 8 Percy Street, London, W.1. [5738]

GOLLINS, MELVIN, WARD & PARTNERS are looking for staff to work on the design of hospital, university and office projects. Age and experience are less important than enthusiasm and interest in architecture. Five-day week, quarterly bonuses, pensions scheme. Ring Welbeck 9991 for appointment. [5740]

HOWELS AND DOHERTY, F.R.I.B.A., F.R.I.C.S., Masonic Buildings, Bangor, North Wales, require one qualified Architectural Assistant, or near qualified. Interesting work in pleasant area. Ability and energy essential with salaries accordingly. [5721]

J. DOUGLASS MATHEWS & PARTNERS, Chartered Architects, 3 Ebury Street, London, S.W.1, require Assistants of post-Intermediate standard. Please write, giving full details of education and experience. [5751]

PLAYNE & LACEY urgently require a recently qualified Architect or a Final standard evening school student for work on large scale university development. Telephone: WHI 2552 for interview. [5754]

SCHERRER & HICKS, 19 Cavendish Square, London, W.1, require immediately several assistants of graduate standard prepared to accept responsibility. Interesting and varied projects. Apply giving age, qualifications, experience and salary required. [5697]

TAYLOR, YOUNG & PARTNERS, Manchester, require assistants for work on schools, hospitals and other projects. Apply in writing to 195 Oxford Road, Manchester 13. [5726]

THE Stewartry of Kirkcudbright County Council require Assistant Architects on salary scale £795 x £35-£1,075 per annum. There are also vacancies for Architectural Assistants on salary scale £605/£735 per annum. Placing on salary scales will be in accordance with qualifications and experience. A local authority three-apartment house is available for letting to one successful applicant. Applications giving age, qualifications and details of previous experience and the names of two referees to be lodged with the County Clerk, County Offices, Kirkcudbright, not later than 14 days from the appearance of this advertisement. [5768]

WEST County office. Progressive Architect requires responsible assistant. John Radford, A.R.I.B.A., 14 Southernhay West, Exeter. Telephone 72910. [5731]

VERNER REES, LAURENCE & MITCHELL require Assistants for work on university projects. Please telephone PARK 3900 for interview or write to 38 Holland Villas Road, W.14. [5753]

SITUATIONS VACANT

BUILDING DRAUGHTSMAN required to assist with work in connection with factory alterations and extensions. Applicants should be experienced in the preparation of working drawings and associated details under supervision. Ability to assist with the preparation of estimates and specimens, and negotiations with contractors would be an advantage. Age 20-30. Apply in writing to the Employment Officer, Hoover Limited, Perivale, Greenford, Middlesex. [5767]

HEATING and Ventilating Draughtsmen required to assist in the design and detailing of new schemes and modifications to existing plant. The work covers most industrial services. Write: ref. HVD/1, Personnel Services Division, The Metal Box Co. Ltd., 37 Baker Street, London, W.1. [5763]

SENIOR DRAUGHTSMAN required with sound knowledge of building construction for preparation of detailed drawings and schemes for new and existing industrial buildings. Write: ref. SID/1, Personnel Services Division, The Metal Box Co. Ltd., 37 Baker Street, London, W.1. [5764]

Classified advertisements continued overleaf

M S L have been retained to advise on the appointment of a

COMPANY ARCHITECT

for a public company owning several hundred plots of land throughout the country which are developed for advertising or building purposes.

The appointment will be based at the head office in the Midlands and will carry responsibility to the Managing Director for advising on the harmonising of outdoor advertising sites with amenity and drawing up plans, for the inspection and maintenance of the company's property and for building development either by the company or with the tenants.

Candidates must be qualified architects with experience of design and repair

work and should be used to negotiations with Local Planning Authorities, surveyors and contractors. A.M.T.P.I. or A.R.I.C.S. qualifications would be added recommendations.

Preferred age about 35. Salary £1,500-£1,750 with an attractive pension scheme.

Please send brief details in confidence, quoting reference YT.1977, to M. B. Berks. In no circumstances will a candidate's identity be disclosed to our client unless he gives permission after a confidential interview at which he will be given full details of the appointment.

MANAGEMENT SELECTION LTD., 17, STRATTON STREET, LONDON, W.1

SITUATIONS VACANT (cont)

THE LONDON HOSPITAL, Whitechapel, E.1, has vacancy in an approved office for a Technical Assistant to assist in the preparation of schemes arising from modifications to and development of building works. Technical requirements up to Intermediate Standard R.I.C.S. (Building Section). Problems are varied and embrace all aspects of building design and construction. Salary: £565/£795 according to experience. Write to House Governor. [5765]

SERVICES OFFERED

GEN. Estimating Service. This service especially for the small builder. Your alterations and constructions priced. Qualified. 35 years in building construction Box 5658. [5746]

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Advertisements under this heading only are accepted at the specially reduced rate of 6d per line, minimum 1/6.

ARCHITECT, 30 school trained, eight years' experience principally in private practice, now in responsible position in Midlands office, seeks permanent post in South or West Country where ability and enthusiasm would be valued. Present salary, £1,000 plus bonus. Box 5743. [5747]

ARCHITECTURAL ENGINEER, with wide and varied experience of large contracts, site supervision, and office control, seeks position in South-West, South or South Midlands. Box 5603. [5722]

FOR SALE

"ETHULON" Plastic Tracing Film, offered at under half price. 20yd by 20in at 30s, 20yd by 29in at 50s, post free. Send s.a.e. for sample. A. Godfrey & Co., 3 Branch Hill, London, N.W.3. SW1as Cottage 2717. [0136]

PRIVATE DRIVES AND ROADS

PRIVATE Drives, Forecourts, Estate Roads, etc.: resurfaced or reconstructed by Specialists. Tarmacadam or Tarspraying. Estimates Free. Stanley Lucas (Slough) Ltd., Alexandra Road, Slough 21279. [0136]

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SMALL SPACE at Building Exhibition for display and leaflet disposal on stand visited by architects. Financial arrangement. Box 5825. [5760]

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ENQUIRIES invited for manufacture of builders' engineering items—steel frames, trusses, steel doors, etc., particularly in specialist work. Keen prices and quick delivery. Burley's, Weybridge, Surrey. Byfleet 4111. [5650]

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HEATING AND PLUMBING

WE can now cope with new contracts, travelling no object. For free estimates phone Canterbury 3854, or write to L. Stevens, 11 Watling Street, Canterbury. Contractors to the G.E.C. [5714]

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BUILDING STRUCTURE: steel work for T.1 hangar. Complete structural framework of hangar type T.1 for sale. Clear span 90ft, length 175ft, centre height 27ft 6in (floor to underside of truss), inside wall height 20ft clear. Offers welcomed. Write or phone: Woodfield Rochester Ltd., Rochester, Kent. Strood 78421, Extension 31. [5748]

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SECTIONAL TIMBER BUILDINGS, all sizes from 8ft by 6ft to 90ft by 30ft, we are the cheapest in the trade, compare the following examples of ex works prices. Site hut, 8ft by 6ft, £27 15s; 16ft by 10ft, £74 8s; 24ft by 12ft, £114 1s 1d; 30ft by 15ft, £152 9s 6d; 48ft by 18ft, £293 15s; 56ft by 20ft, £368 7s 6d. Floors where required at proportionate extra. Write for free illustrated price list and specifications. Delivery arranged anywhere. Universal Supplies (Belvedere) Ltd., Crabtree Manorway, Belvedere, Kent (Erith 2948). [0082]

BUSINESS OPPORTUNITIES

MANUFACTURERS considering the marketing of a range of domestic stainless steel sinks would like to hear from builders or builders' merchants who may be interested in handling these. Box 5629. [5728]

CRANES FOR HIRE

CRANES available, with capacity up to 7 tons. Reasonable rates. E. W. Tyler and Co. Ltd., Cannon Lane, Tonbridge. (Phone 4024). [5773]

NOTICE

COVELL & MATTHEWS, F.A.R.I.B.A., A.M.T.P.I., will be operating an office on the site of Piccadilly, Manchester, as from November 2, 1959. Will interested manufacturers please send literature and trade journals to 6 Lexington Street, London, W.1, and c/o Piccadilly Manchester Properties Limited, Portland Street, Manchester, 1. [5756]

MISCELLANEOUS

A PORTABLE record of your work in photographs. Kaufmann Photography, 43 Mill Lane, London, N.W.6. Tel.: HAMptstead 8920, CHANcery 2345. [5752]

ARCHITECTS, Surveyors, demolishers, etc., we are buyers of redundant and surplus refrigeration equipment, all kinds. We dismantle and collect. Best prices given. Write Box 5516. [5702]

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Issue dated 4 November 1959

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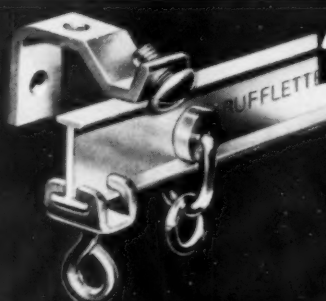
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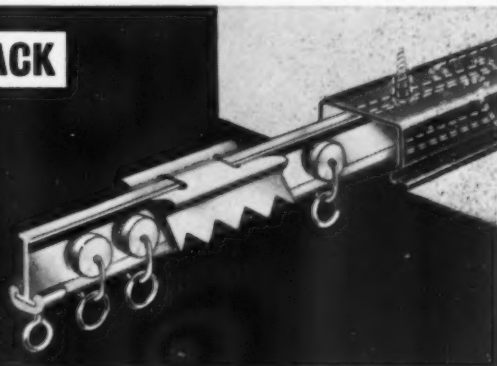
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'Rufflette' Brand cubicle track is one of the simplest and best curtain systems for space division. An ingenious method of suspension from wall or ceiling leaves floor space unobstructed, allowing the free movement of staff and equipment. Many leading authorities have specified cubicle track for installation in hospitals, clinics, schools, hotels, stores, hairdressing salons and aboard ship.

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